

# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. XVIII

GRAND RAPIDS, MICHIGAN, JUNE, 1919

No. 6

### *Original Articles*

#### URETERAL STONE. DIAGNOSIS AND TREATMENT.\*

P. L. THOMPSON, M.D.

Ureteral stones may form either in the kidney or kidney pelvis and pass down into the ureter or originate in the ureter above a stricture or any abnormality which interferes with free urinary flow through the ureter.

Etiologically, there are three factors to consider in the formation of stone: chemical characteristics of the urine; the mechanical hindrance to the urinary flow from various causes (chiefly, inflammatory stricture); and infection in kidney pelvis or ureter. Quite often one sees patients that repeatedly over a period of years pass small uric acid calculi; and in whose urine or urinary tract one is unable to demonstrate any other abnormalities. More and more is it coming to be recognized that stricture or any other mechanical interference to the urinary flow may be a determining factor in stone formation. The formation of small calculi, partially embedded in the wall of the ureter, above a stricture; the diameter of the stone being less than that of the ureter at the strictured point bears out this mechanical influence.

Of other conditions causing a mechanical hindrance to urinary flow besides true stricture are pressure from a periureteritis or inflammatory tumors in neighboring organs, new-growths or other mechanical pressure. Rovsing reports the interesting case of a stone forming in the lower ureter, due to pressure from a pessary. The frequency of stone formation in an obstructed bladder from prostatic hypertrophy is to a certain extent a comparable condition.

We know that infection of the urinary tract, either from organisms excreted by the kidney, by direct hematogenous metastasis or by transmural infection from neighboring organs; appendix, intestine or pelvic organs with the con-

sequent detritic products could easily form a nidus for calculi; the cast off material (composed of bacteria, blood, used-up leucocytes and exfoliated epithelial cells) acting as a foreign body. To one who has seen the rapid incrustation with urinary salts of foreign bodies in the bladder, this is readily appreciated. The frequent association of stone with both simple and tubercular inflammation of the urinary tract is a well recognized fact.

There are three anatomical points of narrowing in the ureteral tract in or above which stones are apt to lodge: namely, junction of kidney pelvis with upper ureter; at the brim of the true pelvis and entrance of the ureter in the bladder wall. These narrowings are due to two factors, an increase of the circular musculature at these points and the mechanical relations to other structures: the renal fascia folds over the renal-pelvic ureteral junction; there is a definite bend in the ureter at its crossing of the iliac vessels at the entrance of the true pelvis; and the bladder fold of fascia and musculature at the ureteral entrance to the bladder wall.

Besides these normal anatomical narrowings, we may have the lumen decreased in size from extraneous pressure or true stricture anywhere along the ureter. These conditions may be either congenital or acquired; the great majority being due to inflammation and its effects on the ureteral and periureteral tissues. The inflammatory strictures are much more common than is generally known; Hunner has reported over three hundred cases treated in the Johns Hopkins gynecological service from 1914 to 1917.

The congenital conditions which tend to occlusion of the ureter are either twists, valve formation, bands due to aberrant vessels or fascial folds or actual narrowing of the lumen. These congenital conditions are probably very rare. The acquired conditions causing interference with the urinary flow have either extrinsic or intrinsic causes. Of extrinsic agencies may be mentioned, pressure from inflammatory tumors or new-growths and traumatic injury

\*Read before Kent County Medical Society, April 23, 1919.

to periureteral tissues. Of the intrinsic causes of obstruction, we have, mainly, inflammatory conditions of the ureter secondary to inflammation in other parts of the body; metastatic inflammation consequent to a primary focus in teeth, tonsils, etc. Of fifty cases of inflammatory stricture of the ureter, reported by Hunner, two were due to gonorrheal infection; three **were due to colon bacillus** and forty-five to metastatic infection of the ureteral wall; with the primary focus in the most of the cases in tonsils or teeth. Quite commonly, we have ureteral stricture due to a tubercular inflammation of the ureter secondary to a tubercular kidney.

New-growths of the ureter are very infrequent: hence, this is an extremely rare cause of obstruction to the urinary flow.

The diagnosis of ureteral stone, using modern methods, is comparatively easy. The clinical history and physical findings; examination of the catheterized urine; cystoscopy and ureteral catheterization; the use of the wax-tipped catheter in certain cases; the X-ray examination with the shadowgraph catheter in the ureter combined with ureterography are all of use in establishing the diagnosis. The stones which are not opaque, after ureterography, usually produce a shadow due to the deposit on the stone of the medium used in making the ureterogram. To visualize these non-opaque stones, a plate is made usually about two days after the injection of the opaque medium.

Clinically, in these cases, we have attacks of colic pain recurring at varying intervals and of varying intensity, centered along the urinary path and radiating to lumbar region or groin, penis or labium or both up and down in some cases. Occasionally, the pain may be localized without the stereotyped textbook radiation or the pain may spread over the entire abdomen. These attacks of pain may have associated with them, more or less and usually more; acute stomach and intestinal symptoms; nausea, vomiting, tympanites and stoppage of the fecal current. These last symptoms may be of such intensity as to overshadow the others and lead to the mistaken diagnosis of ileus. Numerous reports of such mistakes have been recorded. One of our cases illustrates this symptomatic course.

Urinary examination usually shows blood, some pus, increased epithelial debris and at times, small fragments of stone or stone-forming material: the blood, as a rule, being much increased during and immediately after an attack of colic.

The urinary findings may be identical with, and the clinical symptoms may be simulated by other pathological conditions of the urinary tract; namely, inflammatory stricture; tubercular lesions of kidney or kidney and ureter; neoplasms and even occasionally by congenital cystic kidney.

Pathological conditions, outside of the urinary tract may confuse, as when we find blood in the urine in appendicitis, which Kellogg Speed has shown to be not only possible but to occur quite frequently. Such a condition might be confused with a right ureteral calculus.

In women a stone in the lower ureter may at times be palpated through the vagina.

Aside from the stones in the extreme lower end of the ureter, cystoscopy alone, is of little value in the diagnosis as the bladder often shows little or no change in these cases.

Ureteral sounding may or may not detect the presence of a stone; the catheter may slip past the stone with no indication of its location. Obstruction to the advancement of the ureteral sound or catheter is not conclusive evidence of a stone, as we may have to deal with a stricture or the instrument may be caught in a fold or bend in the ureter so as to interfere with its farther advancement. Ureteral catheterization, necessary in making the ureterograms, is of service in demonstrating the complications of stone and the functional activity of each kidney, which is of vast importance in determining whether operative or nonoperative procedure is to be instituted.

The radiographic work is best done following the ureteral catheterization, with the catheters in situ. A thorough emptying of the intestinal canal, using castor oil or some other vegetable cathartic is a preliminary necessity for the radiographic work.

The whole urinary system down to bladder, both sides, should be examined by the X-ray to be sure that no other stones are present, besides the one suspected.

After the first plate is made, either with or without the shadowgraph catheter in the ureter, another set is taken following the introduction through the catheter of a varying amount of some opaque material (preferably 15 per cent. thorium nitrate sol.) to demonstrate pathological changes in the ureter and pelvis of the kidney, e. g. stricture of the ureter and hydro- or pyo-nephrosis.

The use of the wax-tipped catheter has a very limited field, and is of value only when positive scratch-marks are present, as a stone might be

so covered by soft material or so located as to fail to make the expected marks.

With an alkaline urine and good X-ray technic all ureteral stones will show; with an acid urine we may have stones which cast no shadow. These may be demonstrated after the opaque sol., used in making the ureterogram has been washed out by the flow of urine. Usually a plate is made two days following the ureterogram and the deposit on the previously non-opaque stone will now show a shadow.

The shadows apt to confuse in the ordinary X-ray examination, i. e. without the shadowgraph catheter or ureterography, are those due to phleboliths, calcification of the pelvic ligaments, plaques in blood-vessel walls, calcareous areas in lymph-glands and foreign bodies and fecoliths in intestine or appendix.

Ureteral calculi are usually oval-oblong in shape and irregular in outline; phleboliths are round with smooth outline; the shadows made by calcification of the pelvic ligaments, calcareous areas in glands or fecoliths and foreign bodies may be of any shape and indeterminate in outline.

Kretschmer has recently emphasized the value of making a double exposure, each at a different angle, with the shadowgraph catheter in the ureter. This exposure is made on one plate and serves to absolutely demonstrate the relation of the two shadows.

The shape and position of the shadow together with orientation by means of the ureterogram or opaque catheter serves to assure one of the condition.

The present day treatment of ureteral stone tends to the conservative side. When we consider that 70 to 80 per cent. of these stones will pass spontaneously; that perhaps 10 to 15 per cent. can be made to pass by certain conservative measures, one should hesitate about doing ureterotomy till other means had failed or the complications demanded relief to save the kidney function.

These conservative measures are the dislodging of the stone by means of the sound, the injection of sterile oil both above and below the site of the stone and the stretching of the ureter below the stone with bougies or ureteral dilator. These measures are repeated according to conditions. The use of sterile oil helps to distend the ureter and lubricate the tract. The use of gradually increased sizes of ureteral bougies aid in enlarging the ureter below the stone and both probably set up increased peris-

talsis of the ureter which may be the main factor in the success of the method.

With this method it may be necessary to slit the ureteral meatus to facilitate the passage of stone from ureter to bladder.

These procedures are usually carried out after preliminary use of cocaine, injected into the ureter.

Combined with this conservative treatment, a series of X-ray plates should be made to show whether or not the stone is changing its position.

In some of the cases, ureterolithotomy may

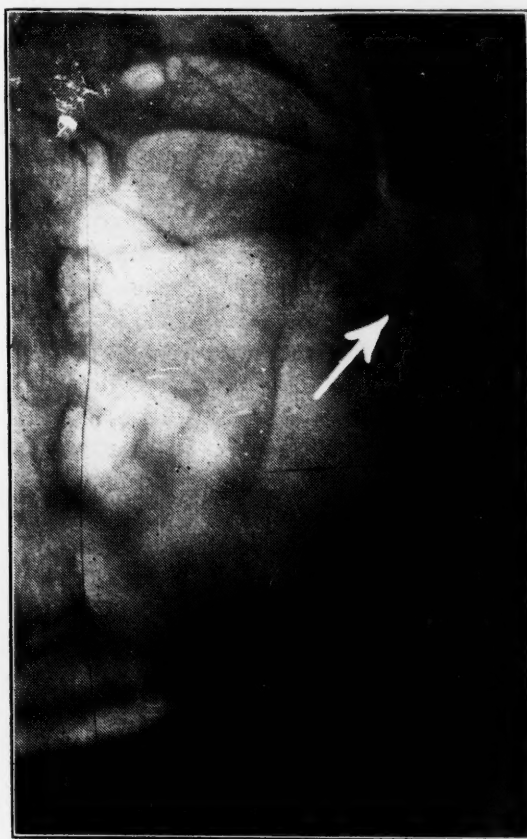


Fig. 1. To show shadow of stone, indicated by arrow.

be the only means of relieving the condition, but it should not be done unless other (conservative) measures have failed or the complications are such as demand early relief to conserve kidney function.

The cases for which ureterolithotomy is most often necessary are those in which the stones are of large size and those embedded in the ureteral wall.

CASE 1. June 12, 1918, J. M., age 42, American; married; farmer. Family and previous personal history, negative.

While working, a year and a half ago, he was taken with a sudden, sharp pain in the right

lower abdomen; this pain radiated to right inguinal region and penis and toward the navel. He was nauseated but did not vomit. He had some fever; no macroscopic haematuria; no jaundice. He was sore in the right lower abdomen for about a week. This condition gradually righted itself and he had no more symptoms for eleven weeks when he had another similar attack. Since then he has had four more; the last one, two weeks ago. He states that he has seen no blood in his urine during or after any of the attacks.

General examination negative. Wassermann negative. Blood; white and red count and hemoglobin, normal. Urine; negative, except a few blood cells. Slight tenderness over right costovertebral angle. Cystoscopic; slight edema about the right ureteral meatus, otherwise negative. Left ureteral catheter introduced to the kidney pelvis with apparently normal urinary output. Right catheter met with an obstruction eighteen centimeters from the meatus. X-ray plate showed a shadow opposite the third lumbar vertebra in contact with the tip of the shadowgraph catheter. An unsuccessful attempt was made to pass the catheter higher after which, fifteen cc. of sterile oil was injected into the right ureter. The patient had a chill, fever and pain for the eighteen hours following.

On June 20, (eight days later) a number five catheter was introduced 24 cm. in the right ureter. An X-ray plate showed the shadow in the lower sacral region. Twenty cc. of oil was injected as the catheter was being withdrawn from the ureter. After this injection he had quite a severe reaction; tenderness over the right kidney and ureter; chills and fever and blood and pus in the urine for his stay in the hospital, (five days). Due to the severe reaction, a period of sixteen days elapsed until the patient returned for treatment. An X-ray plate made on July 6th, showed the stone well down on the pelvic floor. On this date, numbers eight and ten bougies were introduced into the right ureteral meatus and 20 cc. of oil was injected through the catheter above the stone. This was followed by moderately severe pain, more or less continuous for five days when on the 11th he passed an oval irregular, mixed stone, roughly three-sixteenths by three-eighths inches in size.

CASE 2. C. N., Swede, age 37, married, electrical worker. One maternal uncle died of pulmonary tuberculosis, the family history is otherwise negative.

Personal; always well till two years ago, when he had an attack of severe, colicky pain in the lower left abdominal quadrant. The attack came on in the evening and was accompanied by nausea, vomiting and distention of the abdomen with marked constipation. Always two or three days without a bowel movement with each attack. The pain has always been localized in the lower left quadrant without radiation.

Attacks similar, but varying in severity and length, but always accompanied by vomiting and distension have occurred at intervals to

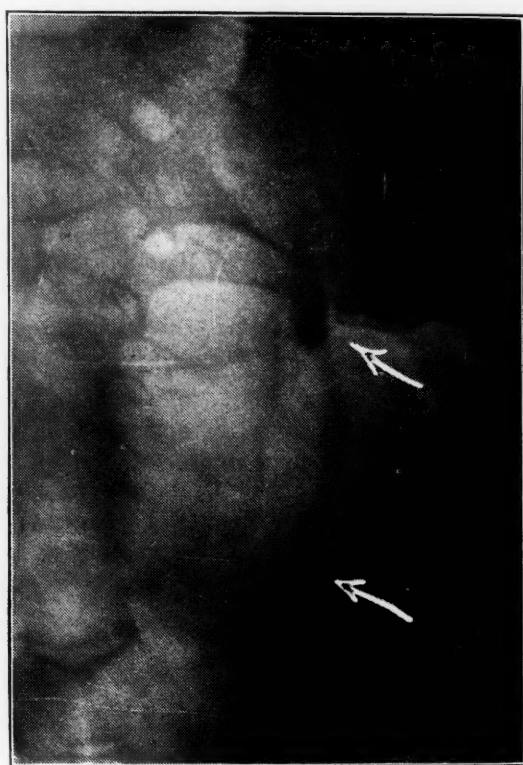


Fig. II. To show stone and shadow of ureter. Arrow mark.

date. Patient states he has had about a dozen; the longest period of freedom from pain was three months; last attack ten days ago. He always needs morphine for relief. He thinks his attacks are due to indigestion as he overeats when feeling well, has some sour stomach and belches gas between his attacks of sickness. He has never noticed blood in the urine during or after the attacks.

General examination, including Wassermann, stool and three different urinary examinations all negative. Regional examination negative.

After intestinal emptying, an X-ray examination showed a dense shadow in the left side of the pelvis at about the level of the second sacral foramen of such shape, size and position that it could well be a ureteral stone.

Three days later a cystoscopic examination revealed a normal appearing bladder with normal peristaltic action of both ureters. The left ureteral catheter (size 6) met with an obstruction 11 cm. from the ureteral meatus but by manipulation was made to pass to the kidney pelvis. A uretera-pyelogram showed only a slight dilation of pelvis and ureter above the stone and a narrowing of the ureter below the stone. After an hour 15 cc. of oil was injected in the ureter above the stone. This set up one of his attacks of pain which lasted three days. At the end of a ten day period an X-ray plate showed no change in the position of the stone and 20 cc. of oil was injected. Two weeks following this, another X-ray examination show-



Fig. III. Shows kidney, pelvis and upper ureter.

ing the stone in the same position, a left rectus (Battle) incision was made down to the peritoneum; this bluntly separated down to the left ureter which was opened above the pelvic brim, the stone milked upward and removed, extraperitoneally. The ureter was sounded and stretched with a No. 9 bougie from above; the incision repaired with 00 chromic gut; a small cigarette drain was led out of the incision from the cut in the ureter and this was left in 24 hours. No drainage. Uncomplicated recovery. The stone removed was a mixed oxalate, oblong, one-fourth by one-half inches in size.

CASE 3. April 2, 1918. C. J., age 42, sedentary occupation. Family history, negative; personal history, two attacks of appendicitis in 1911; appendix removed in 1912.

While on a fishing trip in May, 1917, he had

an attack of pain in the right lower abdominal quadrant. This lasted only about an hour, and he noticed no particular tenderness afterward. History otherwise negative. One week ago, while about, he was taken with a very intense, colicky right-sided, lower abdominal pain which radiated to the penis and right lumbar region. The character of the pain gradually changed to a constant severe ache and tenderness. The pain was accompanied by nausea and vomiting at the beginning of the attack.

General examination: Temperature, 101 F.; pulse, 91; white cell count, 13,000; Wassermann negative. Urine had a moderate amount of pus and blood. No visible hematuria, otherwise negative.

Examination shows the right side of the abdomen, especially the umbilical right semicircle, to be very sensitive. Fist percussion of the left costovertebral angle, negative; on the right side, it produces a very intense pain, radiating downward. Percussion dullness increased in the right lumbar region.

Cystoscopic examination showed some redness and edema about the right ureteral meatus; otherwise negative. Catheter in the right ureter met an obstruction 9 cm. up; but by manipulation was made to pass to the kidney pelvis. Fifty-four cc. of cloudy urine ran by continuous drop from this side, showing very clearly the pyonephrosis.

X-ray plate showed a small, round-oval, smooth shadow at the lower level of the right sacro-iliac joint. Injection of 40 cc. of thorium solution covered this shadow and demonstrated graphically the stricture below the stone and dilatation of ureter and kidney pelvis above the stone. Figure 1 is the shadow of the stone; Fig. 2 shows the stricture in the ureter and the dilatation of the ureter in the true pelvis with the stone shadow covered; and Fig. 3 shows the dilated condition of upper ureter and kidney pelvis.

Catheterization of the other side showed a normal peristaltic urinary output, and the urine collected was normal.

Functional: Phthalein used, intravenous injection; left side, 1st hour, 30 per cent; 2nd hour, 25 per cent. Dye appeared in 2 minutes.

Right side, 1st hour, 9 per cent; 2nd hour, 15 per cent. Dye appeared after 18 minutes.

X-ray examination of the rest of the urinary tracts, both sides gave no evidence of other stones.

Only one injection of oil was given in this case as a plate made later showed no change in

the position of the stone and as the complicating conditions seemed of too much consequence to delay relief.

On April 12, 1918, an oblique incision was made above and parallel to Pouparts ligament, the ureter opened at the brim of the pelvis and the stone removed extraperitoneally. The stone was embedded in the wall of the ureter and adherent to it. Below the stone was a strictured place in the ureter, demonstrated by bougies passed through the incision in the ureter after removal of the stone. The incision (in ureter) was repaired with fine chromic gut, with a cigarette drain leading out. Urine drained along the track for ten days and then the incision closed on removal of the drain and farther convalescence was uninterrupted; the patient leaving the hospital twenty-six days after operation and has had no return of any urinary symptoms.

#### ABSTRACT OF PAPER ON FRACTURES AND THE APPLICATION OF ARMY SPLINTS.

CAPT. MERCER.

Captain Mercer's talk was largely one of demonstration and it is impossible to abstract it to any degree of satisfaction. It was a very important subject and one handled in a way which every man dealing with fractures should have heard.

Various splints as used in the army were demonstrated. At first the Army used various splints, then limited itself to the standard splints. America only uses seven kinds, two or three of these are capable of many modifications. The field coaptation splint is capable of being broken along several lines and may be moulded. Every man in the ambulance corps was taught the use of these splints. All of the splints used in the Army are adaptable to civil life.

The Jones foot splint was used more in the English army, but not so much in the American army. The Jones hand splint can be moulded as was demonstrated. The Jones humerus extension splint fits over the body as demonstrated. It is necessary to abduct, externally rotate and approximate the lower fragments to the upper as demonstrated. Plaster may be used with these splints. The Hodgen splint is covered with canvas and can be variously modified. Considers the Thomas splint one of importance. The pressure is brought on the tuberosity of the ischium and demonstrated how it should

be applied. Instead of using adhesive plaster the following formula was recommended in its place: Resin 50 per cent., Alcohol 50 per cent., Benzine (pure) 25 per cent., Venice turpentine 5 per cent. Also uses a short Thomas splint as demonstrated. They are light, comfortable and dressings may be done with them in place.

In seven cases of patellar fracture used the expectant treatment with good results, no operations.

The various phases connected with flat foot were discussed and demonstrated. One definition of flat foot given was: 'flattening' of the arch with twisting of the foot.' Raises the inner border of the shoe one-fourth inch, that raises and throws the weight bearing line back where it should go. Illustrated the old Thomas heel which he said was used as an advertising scheme by some.

In treating fractures he used one-fourth gr. morphine, then after a few minutes put them under screen and fracture was then reduced without the necessity of a general anesthetic.

Demonstrated that one reason why sprains were so long in healing, was because small spicula of bone broken off with the ligament.

It is hard to say which gives the best results in fracture of the patella, expectant treatment or operative. Uses expectant treatment largely.

Capt. Mercer demonstrated that in many cases often where anatomical results were apparently not what one would like, yet functional results were good, this often is most important to the patient.

#### DISCUSSION.

Capt. Shackleton: Capt. Mercer is a man after my own heart. Speaks in terms of function. He does not make a compound fracture out of a simple fracture. Has been in orthopedic service, not from choice, but from necessity. Lovetts three points to be considered in orthopedic surgery are: What are you doing, is it worth while, and are you doing it? Formerly a fracture of the patella meant operation, now does it less. Related cases showing result of fibrous union of the patella which proved satisfactory. We should realize that the X-ray shows up the doctor in a bad light, and the shyster lawyer makes use of the exaggeration of the X-ray. When we analyze in terms of function rather than terms of X-ray we get a different view of fractures entirely. Discussed the various shoes demonstrated by Capt. Mercer. He agrees with Capt. Mercer in regard to the metatarsal wedge. Believes results can be brought about by felt pad and inner sole. Thomas heel is of great aid in correction. Position we get is that of bridge on the inner side of the foot, making the patient toe in.

Standard in military splints will be of great value in civil life. The Thomas splint cannot be

improved. Demonstrated how they held for long periods of time when applied on the battle fields. They are simple in application and anyone can apply them effectively. The only one not of practical use is the airplane splint. It gives incorrect posture and will gradually crawl out of position. Described another splint given by Capt. Clare, which is more satisfactory. Work of the medical department abroad was excellent. Most of the fracture cases coming back show excellent work.

Did not operate on ununited fractures for three months, then if there was no evidence of tenderness or other evidence of infection, was massaged for three days then anti-tetanus serum given and they were operated.

Dr. Dan H. Eaton: Used the regular splints which Cap. Mercer has demonstrated in the 83rd Division. Each man in the sanitary detachment had several weeks training in their use, and then had to pass an examination. The men who handled these fractures did good work. There were many cases of compound fracture. In the French hospitals they used plaster of Paris, which was left on for a long time, some as long as 16 or 17 weeks; some of these when received were in frightful condition. They were put in Thomas or Hodgen splints, used Dakin's solution and it was surprising how the wounds healed up, by the use of splints they were easy to irrigate and dress.

Enjoyed Capt. Mercer's paper very much.

Capt. Shackleton: The Thomas splint is very comfortable, area of pressure only about the size of a dollar.

Dr. Goodrich: Asked if the Thomas splint is used in fracture of the hip. Saw one used in Chicago.

Dr. L. H. Stewart: Has had few fractures. Never attempted to wire any sort of compound fracture, uses extension.

Dr. Boys: In patellar fractures it has been his practice to wait a few days to be sure the hemorrhage has been stopped and then do the open operation with suture of the fascia with catgut. This has been very satisfactory in a limited number of cases which he has had. However, we should not be too ready to draw final conclusions from a limited number of cases.

He then reported case of fracture of the humerus, combined with a very open lacerated wound over the inner half of the elbow joint. The wound was so extensive that this was treated first by debridement, almost entirely disregarding the fracture until ten days later when the wound was healed. When attention was directed to the fracture it was found to be in satisfactory position, so that nothing further was necessary in the way of reduction. Good recovery was made in all respects in this case.

He expressed the belief that the average civil hospital was not sufficiently equipped with such splints as the doctor has described and states that these should be always ready and that perhaps the reason they were not was due to the infrequency of fractures as they occur in the hands of any physician in civil practice.

Lieut. Crutchfield: Subject has been well covered. In treatment of fractures first immobilize, X-ray, give morphine and reduce under the screen,

then screen again after splint is applied. Very few cases require general anesthetic, less than 5 per cent. of them do, as most of them are received early. Every case of fracture is a law unto itself. One rule will not apply to all fractures. Remember the mechanics of the part, relax and rest. The bones should be put in apposition, the splint applied and then studied under the X-ray at intervals. It is not the anatomical results, but the functional results that we are looking for.

Dr. Boys asked Lieut. Crutchfield, if he gave morphine to young children.

Lieut. Crutchfield: Makes exception in children, gives them general anesthetic because of fright. Cannot reduce fracture under the screen in every child.

Dr. Tomkinson: About six years ago broke os calcis of left heel, had flat foot as result. Tried various methods, then started to toe in, which gave him good results.

Capt. Mercer: Glad to hear about the case of fracture of os calcis, and the toeing in, which brings the line of weight to its proper relation. All flat feet are abducted feet. Tibialis anticus muscle is put out of use and when we toe in it brings it back. If we will stroke the muscle in and about the joints 10 or 15 times, they will often relax and they can be reduced without anesthetic.

These splints which have been demonstrated can be adapted to any case. In the A. M. A. Journal often find advertisements of some of the pneumatic ambulatory splints. A new army manual of splints is just off the press and gives all these splints and appliances.

# ABSTRACT OF PAPER ON REMARKS ON FRACTURES, JOINT INFECTIONS AND PRIMARY AND SECONDARY CLOSURE OF WOUNDS.

ANGUS McLEAN, M.D.

DETROIT, MICH.

War has broadened surgery. Different angles have been seen by men of the different branches of service, but yet reports of all agree. Impressions from a base hospital of 3,000 beds compared with ordinary civil hospitals give one good advantages for drawing conclusions.

Four-fifths of the cases were battle casualties. The preponderance of the different wounds varied according to the nature of the engagement. Did not look upon machine gun or bullet wounds, that did not hit the ground as seriously as they did the shell or shrapnel which often took a piece of earth with it. Those of the medical profession who went into the service early were lucky as they had opportunity to see all phases from the trenches to the Base Hospital. If there is one thing that did more than others for humanity it was the X-ray. Some

cases had a half dozen pieces of shrapnel embedded in the body. The surgeon did not care to touch these cases without the X-ray, which gave exact knowledge of the location. The X-ray men were a devoted crowd and were tireless.

The cases came in lots of three or four hundred on the hospital trains and the men worked long hours. X-ray was beneficial, especially in the chest where projectiles could not be located without its assistance. It was found that it was not so serious to remove foreign bodies from the heart as had been supposed. Has seen foreign bodies removed from the muscle of the heart.

*Vaccines.*—Typhoid and para-typhoid were of great service. There were no deaths from typhoid, though three cases were so diagnosed. Tetanus in previous wars has been very serious. In this war it was avoided by the use of anti-tetanic serum. The first doctor on the case gave anti-tetanic serum, which was marked on the patient's card, as to time and amount, he then cared for the wounds. Out of 20,000 battle casualties, saw no deaths from lock-jaw or tetanus, this shows what can be done.

One case of death from small-pox was reported in 1917, but investigation showed this case had not been vaccinated.

*Surgical Side.*—After arrival saw what other nations had done. Treatment of wounds they get early, they cut out all of the injured tissue or suspicious tissue. In high explosives, not only the tissue injured directly, but indirectly by sudden shock, even though it looked good if slightly darkened, cut down to the pink tissue. Tissue which had been injured became necrotic. Debridement was first used by the Belgians the first thought was to get primary union. This was changed and they were ordered never to close a wound but to use dressings and solutions. All wounds of the last six months had secondary closure. For six or eight days a culture was taken each day until they got a negative report then the wound was freshened gently and closed, sometimes drainage was used. Good results came from this method. Dakin's solution was used for some time, then surgeons began to prefer some other method because of so many deaths from secondary hemorrhage. The force of the bullet would cut off the blood supply and Dakin's solution not only destroys bacteria but lymph, in about eight or ten days had hemorrhage from giving way of an artery. The Carroll-Dakin solution disintegrates blood

clot. The solution is good if not close to a blood clot or vessel.

Shock after the first hemorrhage can be resuscitated, but not after the second hemorrhage. They had shock teams who transfused with blood or solutions similar to normal salt with some gum Arabic. Without the gum Arabic the solution was soon lost, and results were not so lasting. The gum Arabic slowed up absorption. Evacuation hospitals also had shock wards. Patients were transfused and then sent to the operating room. The same man ten days later, with the same injection will not last more than an hour after secondary hemorrhage.

*Treatment of Fractures.*—Universally used the Thomas splint. Plates did not give satisfactory results. Compound fracture of the thigh usually was infected, dirt, etc., getting into the tissue. They were tedious cases. No plaster of Paris was used. Had set of splints for different parts of the body. Takes thousands of cases to draw correct conclusions from. Not much learned in civil life of injuries to the head. There were two classes; severe which died within a few hours, those not so severe, which hung on for a few days and usually recovered.

Fractures of the jaw gave very satisfactory results from treatment if any jaw was left at all, brought together and used the intra-dental splint after an impression, one upper and one lower, they united quickly. The plastic part of the treatment usually took three or four operations, no wiring was done. Destruction of the mucous membranes was a serious part, patients drooled excessively often so that they had to wear a towel. In chest wounds formerly negative and positive pressure used to be considered and used to operate in cabinets in order to maintain proper atmospheric pressure, now operate any time and place, the same as for other operations. When they close the parietal pleura it is necessary to make it tight and not leave fistula. One thing that has been learned is the freedom with which we can expose the lung and handle as other parts.

*Infected Joints.*—We used to think we never could drain a joint and fix it. These are now opened up and drained, but not fixed with splints. They were moved every half hour or hour and the results have been wonderful.

Three subjects of which we have learned most are treatment of fractures, treatment of injuries to chest and infected joints.

This was illustrated with lantern slides.

## DISCUSSION.

Dr. Boys: Always pleased to hear Dr. McLean, especially instructive in his talk. His subject has been different than we have heard discussed before, he has given us more important points regarding injuries to the chest and fractures.

In civil hospitals we have too little apparatus for the treatment of fractures. Perhaps other things in the hospital have been allowed to crowd this class of patients out so far as preparation is concerned. Reports of medical officers ought to stir us to see that these things are at hand.

Reported a case of malignancy in which he removed two inches of two ribs. The lung was collapsed, pericardium came up into the wound. There was little reaction to manipulation of the contents of the chest. Some blood escaped into the pleural cavity, this was removed and the wound was closed and made air-tight. Did not remove the air, but in a few days the lung expanded to normal conditions. It is rational to explore a chest cavity when necessary. One would think the susceptibility of the chest cavity to infection would contra-indicate it, but war reports seem to disprove this.

Dr. A. W. Crane: Would like to hear Dr. McLean tell us what reaction on civil life the medical experiences of the army will have, and what equipment would be placed in hospitals.

Dr. Boys: Asked if the effect of medical officers being forced to keep records will react on the service at home.

Dr. McLean: Each hospital should be equipped with a set of splints such as are used in the army. The method of treatment of fractures in hospitals will have to undergo revolution.

Never saw an infection of gas bacillus of the lung. Saw two cases of infection of the gas bacillus in parietal pleura which entered from the outside. These were opened up and made good recovery.

Attempts are being made to standardize hospitals. The Field card system is very efficient. Each man tells briefly what he has done. The Surgeon General's office has gathered up material for medical history of the war. A system of questionnaires is being worked out, doing away with so much paper.

## CIRCULATORY DISEASES OF THE BRAIN WITH A REPORT OF 351 CASES OF ARTERIO-SCLEROSIS.\*

SHERMAN GREGG, M.D.  
KALAMAZOO, MICHIGAN.

Definite structural changes taking place in the blood vessels of the body produce a diseased condition characterized by certain symptoms with which we are all familiar. When the blood vessels of the brain are affected we have mental deterioration to such an extent that arterio sclerotic brain disease has become a very large group and constitutes from 10 to 15

per cent. of the cases in hospitals for the insane. During the past four years 351 cases were so diagnosed at the Kalamazoo State Hospital and it might be interesting to review the characteristics of this disease and briefly report the chief symptoms found in this list of cases. We will first consider briefly the anatomy of the cerebral circulation.

The head and its contents are supplied with blood by way of the external and internal carotid arteries and the vertebral arteries, the latter uniting to form the basilar artery. The external carotid supplies the outside of the head sending into the interior of the cranium only meningeal branches. The middle meningeal artery is the most important because it is the largest, is most direct in its communication between the outside and inside of the skull and its area of distribution is related to parts of the brain of great functional importance.

The communication of the branches of the internal carotid in front and the basilar behind forms at the base of the brain remarkable anastomosis known as the "circle of Willis."

It is a matter of both clinical and experimental observation that the brain is very susceptible to the slightest change in its circulation. Its functional integrity is dependent upon the quality and quantity of blood flowing through it, upon the blood pressure and upon the rate of the flow.

Cerebral anaemia may be caused by local or general pathological conditions. An embolus for example causes local anemia and any cachectic state may be accompanied by deficient blood supply and produce a secondary anemia of the brain. A severe hemorrhage in some other part of the body may produce a symptomatic anemia. The coma of hemorrhagic apoplexy is believed to be due to the sudden anemia of the cortex caused by the local loss of blood. Also in sudden and profound hemorrhages from the lungs, stomach, bowels or uterus, syncope and other signs of severe cerebral anemia are often observed. The sudden withdrawal of ascitic fluid, precipitate labor, abrupt disturbance of the heart action, or nervous collapse may suddenly diminish the amount of blood flowing to the brain.

In cases of cerebral anemia the brain substance looks pale, the grey matter whiter than usual and its vascularity diminished. The cerebro-spinal fluid is usually increased in amount.

Microscopically the nerve cells are changed and appear granular. Crile has studied very

\*Read before the Kalamazoo Academy of Medicine, April 1, 1919.

exhaustively in animals the appearance and characteristics of nerve tissue in cases of cerebral anemia following shock, fright and emotional disturbances.

The main symptom produced by this anemic condition in the brain is syncope. The patient suddenly or gradually experiences a sinking sensation the head feels light, spots float before the eyes, the vision is blurred, he feels dizzy and weak, his heart flutters, ears buzz and there may be nausea and vomiting. He falls, his eyes are closed and he becomes unconscious. After a few minutes he regains consciousness, but is somewhat confused and feels sleepy. The pupils are as a rule at first contracted and later dilated; the pulse is rapid and weak, respiration labored, the skin cold and moist. The reflexes are frequently abolished and the patient may die in a convulsion.

Mild cases of cerebral anemia are generally favorable, but cases due to heart lesions, exhaustive hemorrhages and other grave conditions with coma are often fatal. Serious signs are convulsions and marked dilatation of the pupils.

Cerebral hyperemia occurs in plethoric persons with cardiac over-activity and cardiac enlargement. It occurs in the beginning of fevers and in cases of extreme nervous irritability, such as delirium, acute maniacal states, neurasthenia, hysteria and exophthalmic goitre. Any mechanical obstruction to the return flow of blood from the head will cause passive cerebral congestion. This condition is seen in tumors of the neck, mediastinal growths, aortic aneurysms, pulmonary emphysema and in mitral stenosis. Tight bands and collars, severe coughing or sneezing and other severe muscular efforts may cause a temporary congestion and increase the symptoms already produced by other factors. In some cases the face flushes and feels hot, the conjunctiva is injected and there is headache, dizziness and perhaps nausea.

Prophylaxis is important. Stimulants, over exertion, mental excitement, dissipation and excesses of all kinds should be avoided. Thorough catharsis, ice cap to head, feet placed in hot water are indicated in this condition. Venesection may be advised if the heart action and general strength do not contra-indicate it.

Clinically there occur several varieties of arterio sclerotic disorders which are determined by the localization of the diseased blood vessels and the severity and progress of the disease. The mental deterioration which is associated with vascular lesions, such as hemorrhage and

cerebral softening is frequently observed. The causes which influence the occurrence of arterio-sclerosis in the body affect the cerebral vessels also. The blood vessels of the brain are peculiarly liable to changes and according to Wada they differ from the vessels of the body by having fewer elastic fibers and a poorly developed media. The vessels of the brain are often subjected to unusual strains which come from excessive nervous functioning. Usually cerebral arterio-sclerosis is a part of general arteriosclerosis of the vessels of the body with very little change in the vessels of the brain. The reverse of this is frequently true as is so frequently shown in post mortem examinations.

Arterio-sclerosis is as a rule a disease of advanced life, very few cases being seen as early as 40. In these early cases the disease is usually due to alcohol or syphilis. Individual predisposition plays an important part in its occurrence and a family history of hardening of the arteries is very common.

In the process of ageing of the body the cerebral arteries seem to be more affected than the other vessels. Important factors are alcohol syphilis, chronic lead poisoning, infectious diseases, rheumatism, severe mental strain and business worries. Thayer and Fabry state that "between the ages of 40 and 50 the media reaches its maximum thickness and then there is increase in connective tissue. After the fifth decade there is a progressive increase in the thickness of the intima. Calcification in the deep layers of the intima becomes more common with age, four out of five cases in the eighth and ninth decade showing this change."

Kiset calls attention to the enlargement of cardiac dullness as a sign of impending cerebral hemorrhage in corpulent persons past 50, especially when associated with functional bowel disturbance. Long before the arteries feel hard or show a tortuous course, a permanently high blood pressure reveals the tendency to arterio-sclerosis with resulting over work on the heart. Early signs are headache, transient vertigo, forgetfulness, especially for names and figures, slight motor disturbances, chilliness of the hands and feet, a sensation of heat on top of the head or a burning patch on the skin.

As a result of these pathological changes in the arteries there may occur focal softenings in the brain or miliary hemorrhages. The vessel walls are weakened by the degeneration and miliary aneurysms are formed. The rupture of these is the most important cause of spontaneous cerebral hemorrhage. The clinical symp-

toms of arterial degeneration are those of a progressive lessening of the mental ability, especially of the memory, with transitory and permanent neurological disturbances. The onset is usually gradual and even in those cases in which the disturbance seems to date from an apoplectic attack, it is possible to detect some evidence of mental impairment for varying periods before the attack. Intellectual workers are often able to appreciate that the mind works less effectively and a greater effort is required than usual to do their accustomed mental work. Mental fatigue, forgetfulness, disturbance of sleep, or abnormal drowsiness may be among the first symptoms. Increased emotional disturbances, as crying without adequate cause, also there is irritability and suspiciousness. Occasionally attacks of disturbed consciousness occur, and loss of the sense of direction and location. These patients are easily bewildered and confused. Delusions of suspicion and persecution may develop due to their inability to properly interpret their sensations and the motives of others. Headaches, sensation of pressure in the occipital region are frequent. These bear a close relation to high blood pressure and are made worse by actions which cause cerebral hyperemia. Dizziness is a common symptom. This may be only moderate in degree, or may be sufficiently severe to cause the patient to stumble and fall. Attacks of an apoplectic or epileptiform nature frequently occur. The recovery from these may be complete but it is more usual for some slight disturbance of motility or sensation to permanently persist. Transitory sensory disturbances are frequent, such as numbness, prickling and tingling of extremities. Speech is frequently interfered with and there are always aphasic symptoms when the speech center in Brocha's area is irritated. Cardio-renal symptoms practically always accompany this disease. The heart is enlarged and the valves thickened and incompetent, especially the aortic. The urine often shows albumin and casts. The blood pressure is commonly increased, ranging from 150 to 225 or more mm.

Pulse pressure as a rule is high. Cerebral spinal fluid shows no constant changes that are diagnostic. In many instances the albumin content is increased. In cases where syphilis is a factor there will be an increased number of lymphocytes and the Lange colloidal gold reaction will show a leuetic curve. Such cases are usually classified as arterio-sclerosis, endarteritic type, which is in reality, cerebral syphilis.

The proper management of an unconscious attack in an arteriosclerotic person depends whether the stroke is due to hemorrhage, embolism or thrombotic obstruction. In a large number of cases it is impossible to tell because of the overlapping of symptoms. Coma and paralysis are the two chief symptoms that always point to a serious intracranial lesion. In hemorrhage the onset is sudden or with very slight prodromes and the coma comes on almost immediately. The coma is usually deep and precedes the paralysis. The paralysis at first seems general involving all the limbs but soon recedes from one side. The pupils, contracted at first soon become dilated, unequal and irresponsive to light. The face flushes the cheeks puff out, breathing is stertorous and the pulse rapid and full. These are all contributory signs of the picture of cerebral hemorrhage. Hemorrhage most frequently takes place in the branches of the lenticulo striate arteries supplying the internal capsule, caudate nucleus, lenticular nucleus and optic thalmos. This explains why the symptoms are combined in type, e. g. arm and leg; arm, leg and face; arm, leg, face with sensory symptoms and aphasic complications.

The typical cases of cerebral hemorrhage that come on abruptly and are in a state of profound coma and paralysis, must be differentiated from the coma of uremia, alcoholism, opium poisoning, diabetic coma, epilepsy and hysteria. In uremic coma there is of course no hemiplegia and the pupils are not unequal. The coma comes on gradually and may be preceded by blindness, convulsions and vomiting. If a urine analysis has been made of course the diagnosis is evident. In diabetic coma the breath has the peculiar acetone odor and urinalysis will establish the diagnosis.

In opium poisoning the pupils are equal and strongly contracted, the respiration is slow and there is no true paralysis.

Perhaps the greatest difficulty is when attempt is made to distinguish hemorrhage from embolic or thrombotic apoplexy and in some cases it is impossible to differentiate. The history of the case, its mode of onset and its associated conditions are most important.

Cerebral embolism usually occurs earlier in life than hemorrhage and it is usually associated with heart disease, rheumatism, syphilis or the puerperium. The coma comes on gradually and is less deep than in hemorrhage. The pulse and heart action in embolism are weak, while in hemorrhage they are strong and violent. The

paralysis comes on more gradually, is less complete, is associated with convulsive movements and is more rigid and less widely distributed in embolic obstruction than in hemorrhagic apoplexy.

It is much more difficult to differentiate hemorrhage from thrombosis, particularly as both occur in old age and are dependent upon similar diseased states of the blood vessels. Prodromata such as slight spells of confusion, irritability, paresthesia and dizziness often for days or weeks precede the coma.

The prognosis of these conditions should always be guarded, especially in the comatose stage and until after the temperature is normal. Cerebral hemorrhage is more immediately fatal than either thrombosis or embolism. Deepening coma, Cheyne-Stokes respiration, muscular jerks, convulsions, blood pressure above 230 or below 90, marked rise in temperature are the usual serious signs. After recovery from the coma, restlessness, delirium, trophic disturbances and continued temperature indicate a grave prognosis and probably death in two or three weeks. A favorable prognosis may be held out if the coma clears up early and at the end of the first week there has been no fever.

During the past four years there were 351 cases of Cerebral Arterio-sclerosis admitted to the Kalamazoo State Hospital, 248 men and 196 women. The earliest age of onset was 43 years while the latest was 89 years. The average age of onset being 70.2 years. In 16 per cent. of these cases there was a history of apoplexy and paralysis in the family. Of the 248 men in this group 169 or 68 per cent. used alcohol in some form, while only six women were occasional moderate drinkers. The mental symptoms were not at all constant. The most characteristic symptoms were those of gradually progressive mental deterioration, associated with the so-called "patchy memory." Insight into their mental condition was nearly always lacking, judgment poor and in many cases they were in constant conflict with their environment, showing delusions of persecution, restlessness and mental confusion. In many cases the psychosis was distinctly that of senile dementia but the presence of focal lesions in the nervous system and neurological signs was sufficient to place them in the arteriosclerotic group. The neurological findings were varied. Hemiplegia was present in 44 of the 351 cases, knee jerks equal and diminished in twenty-eight cases, absent knee jerks in thirteen cases; equal and exaggerated in seventy-five cases. The tongue

deviated from the median line in sixty-nine cases and there was facial asymmetry in ninety-one cases. There were twenty-four cases of aphasia. Pupillary changes, consisting of irregularities in size were found in sixty-one cases, irregularities in outline in seventy-eight cases, sluggish reaction to light in 126 cases and stationary pupils in eighteen cases. All but eighteen cases complained at times of vertigo. The systolic blood pressure varied from 130 mm. to 250 mm. The average was 175 mm. The average diastolic pressure was 100.6.

Post mortem examination was done on 42 cases, the pathological diagnosis confirming the clinical in all cases but three, in which a diagnosis of senile dementia was made. Gross cortical softenings were found in thirty cases, brain hemorrhage in seven cases, sclerosis of blood vessels in forty-one cases, aphasic lesions in six cases. Cord lesions were found in eleven of the cords examined. Practically all of these cases showed thickening and tortuosity of the coronary arteries, hypertrophy of the left ventricle with cardiac enlargement, stiffness of the aortic leaflets, patches of thickening on aortic walls with dilatation of the aortic arch. Chronic diffuse nephritis, cirrhosis of liver, fibrosis of spleen and pancreas, atrophy of brain tissue was usually present.

In these forty-two cases, broncho-pneumonia was present in eleven cases, lobar pneumonia in seven, and pulmonary tuberculosis in one, abscess of lung in one.

*Treatment.*—While the prognosis for cure is bad, it is possible to arrest the progress of the disorder by a carefully regulated mode of life and diet accompanied by medical agents as symptoms indicate. Arterio-sclerosis is not an acute disturbance but is the result of harmful factors which have exerted their influence over a long period of time. The liability to arterio-sclerosis is lessened in those who lead an even life, unburdened by worries and unusual emotional strain, moderate in habits of eating and drinking, and who are free from the influence of alcohol and syphilis. Cerebral arterio-sclerosis is essentially a disease of advanced years and in this period it is advisable that the individual's mode of life be adjusted to meet the changes which the body and nervous system undergo in physiological involution.

As soon as the first symptoms appear the patient should be relieved from business responsibilities and exciting influences and secure complete mental rest. The diet should be carefully regulated, alcohol abstained from com-

pletely and the use of tobacco reduced to a minimum. As a rule the three regular meals should be replaced by more frequent ones consisting of smaller amounts of easily digested food with a minimum amount of meat. Whatever causes flatulence should be avoided. When headache, insomnia and nervous symptoms are troublesome it is of advantage to place the patient on an exclusive milk diet for a time.

*Hydrotherapy.*—Warm tub bath (temp. 98 to 100°) once or twice daily. Massage of muscles is beneficial because depletion of the veins may follow giving relief to overfilling of arteries. Either sodium or potassium iodide may be used and are the best medicinal effects. The best effects are obtained when they are used in small doses and continued over a long period of time. For insomnia, warm milk and hot foot bath at bed time. Care must be taken in administration of heart stimulants. Usually a sedative is better and safer.

In hemorrhage the head should be high with plenty of pillows and the body placed in a half reclining position. Cold may be placed to head to cause contraction of the cerebral vessels and heat to the lower extremities to dilate the blood vessels and lessen the blood pressure in the brain.

If the case is one of embolic obstruction our desire is to increase the intracranial blood pressure. For the embolism already being there and beyond the hope of immediately removal, it is an object to check its progress and further development by suddenly making it stationary. To do this the head of the patient should be placed as low as possible, instead of a cardiac sedative a stimulant acts more favorably, such as digitalis or ammonia. The head should be to one side, the nurse should keep the tongue forward and keep the mouth swabbed out. Venesection is not to be recommended unless the pulse is strong and full and the heart in good condition and the patient robust. About ten ounces of blood may be withdrawn. The heart action is however, usually weakened in apoplexy and to weaken it still more, deprives it of its natural stimulus and is not to be recommended. Venesection should never be employed in embolism.

In traumatic conditions, in which the symptoms indicate a superficial location of the clot, trephining for the removal of the clot may be considered.

Certain cases are helped by lumbar puncture and the withdrawal of 20 to 30 cc. of fluid thereby relieving the increased intracranial pressure.

It is a very difficult matter to carry out treatment of these kind of cases outside of an institution especially when mental symptoms are prominent, such as delirium, persecution, mental confusion and extreme irritability. Many of them get along much better and are more contented when among strangers than when in their own homes.

Hot milk, hydrotherapy and simple hypnotics when carefully used are effectual in controlling restlessness and much more satisfactory than indiscriminate use of sedatives.

#### DISCUSSION.

Dr. Harvey: Not in position to comment on the paper, but wishes to express his appreciation of its excellence. It shows a great amount of experience and ability.

Dr. Fulkerson: Circulatory disturbances of the brain do not come within the scope of the ophthalmologist, but wishes to urge the early examination of the eye in this class of cases. Has been surprised to find how early and how easily the changes can be found in the eye. Ophthalmoscopic examination will render a great deal of service in many of these cases and the general man should familiarize himself with the use of the ophthalmoscope.

Dr. Jackson: The essayist has observed a large series of these cases and his experience is of great value. Asks what proportion of these cases die of paralytic symptoms. Janeway states that only a small per cent. die with apoplectic symptoms, but rather a large per cent. die from cardiac causes. Would expect from a series such as just reported, that a larger percentage would have terminal cerebral symptoms.

Dr. Penoyer: An article in Clinical Medicine emphasizes the point brought out by Dr. Fulkerson on the importance of the ophthalmoscopic examination. Patients having arterio-sclerosis often have a low blood pressure. Arterio-sclerosis may involve only certain regions of the arterial system. Abbott has worked up the subject of hypotension and says that there is a class of arterio-sclerosis in which the renal changes may not be marked. We should examine the condition of the blood vessels and along with this consider the findings of the ophthalmoscope. Many cases become cardiac cases.

Dr. Gregg: Agrees with Dr. Fulkerson that a very important thing is the examination of the fundus of the eye. Do not get as clear a conception of the condition of the brain in any other way. Examine for the tortuosity of the blood vessels, etc. Does not believe the percentage of arteriosclerotic patients who died of stroke to be very high, probably not over 10 per cent., some other lingering disease usually carries them off, such as cardiac disease, pneumonia, etc. Arterio-sclerosis may bring on an exhaustion, and it is hard to tell what really did cause their terminal symptoms. The complete rest is not satisfactory in all cases and should be modified according to the case. There should be lessening of responsibility but not absolute inactivity in early cases.

A NOTE ON THE TREATMENT OF INFLUENZAL PNEUMONIA BY INTRAVENOUS INJECTION OF NON SPECIFIC PROTEIN.

THEODORE LOUIS SQUIER, M.D.

(From the Department of Internal Medicine, University of Michigan.)

In spite of the fact that many articles have already appeared concerning the excellent results following non specific protein therapy in influenzal pneumonia we feel that its value can not be over emphasized. To attempt a detailed discussion of the merits of such treatment would lead us beyond the scope of this paper. We wish merely to present four cases, the first two of which were treated with the idea in mind of combating the infection by supplying additional specific immune bodies as such. The apparent failure of this treatment in the second case led to the successful use of non specific protein in this and the two subsequent cases.

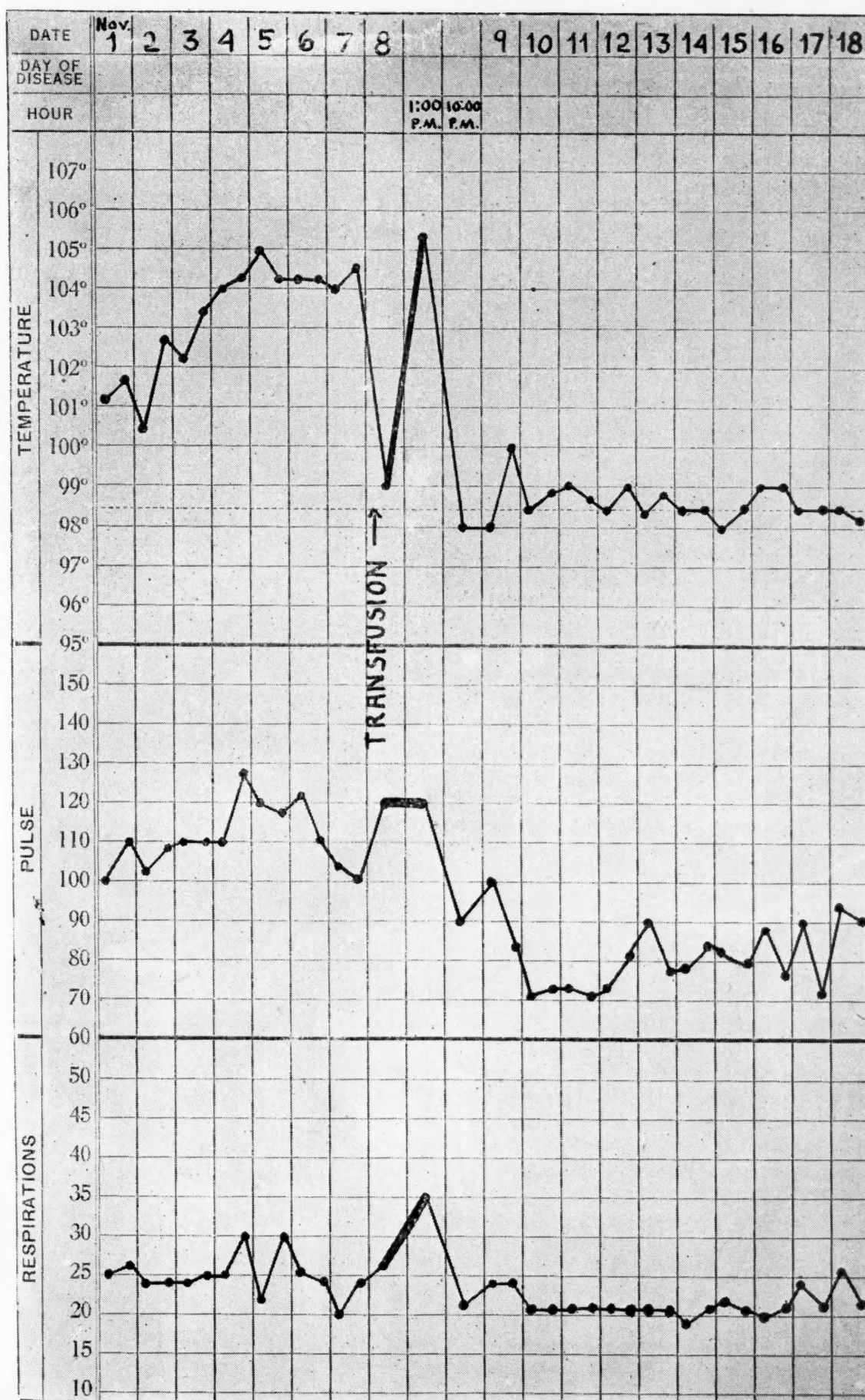
CASE 1. The patient, a nurse, entered the ward Oct. 29th with symptoms of influenza. Her temperature, pulse and respiration remained normal subsequent to her admission and as she felt well and there were no physical signs discovered she was discharged on the 31st. On the day following her discharge she re-entered the ward with a temperature of 101.5 degrees. Her symptoms increased in severity but with no definite abnormal lung signs until Nov. 4th when her temperature rose to 104 degrees and her respirations increased to 30. A few crackling rales were heard at the left base and a definite area of consolidation was found in the left lower back. She complained of general aching, was nauseated and vomited frequently. On the following day she raised blood streaked sputum, had a great deal of pain in her left side and coughed considerably. The nausea continued and on Nov. 6th she was irrational at times. Her condition became progressively worse until on the 8th her temperature dropped to 101 deg., but the pulse increased in rapidity, cyanosis was marked and her respirations were of the rattling, bubbling character which had proved of ominous import in preceding cases. She was at this time given an intravenous injection of 450 cc. of citrated blood (homologous) from a patient who had recently recovered from influenzal pneumonia. The transfusion was preceded by the withdrawal of 250 cc. of blood. Forty-five minutes later she had a severe chill lasting half an hour. Her temperature rose to 105.2 degrees and then fell

by crisis, as shown on the chart, to normal, and there was a coincident fall in the pulse and respiration. The change in her general condition was remarkable. After the reaction she became perfectly rational, was very comfortable, and except for a post critical rise to 100 degrees on the following day her temperature thenceforth remained normal.

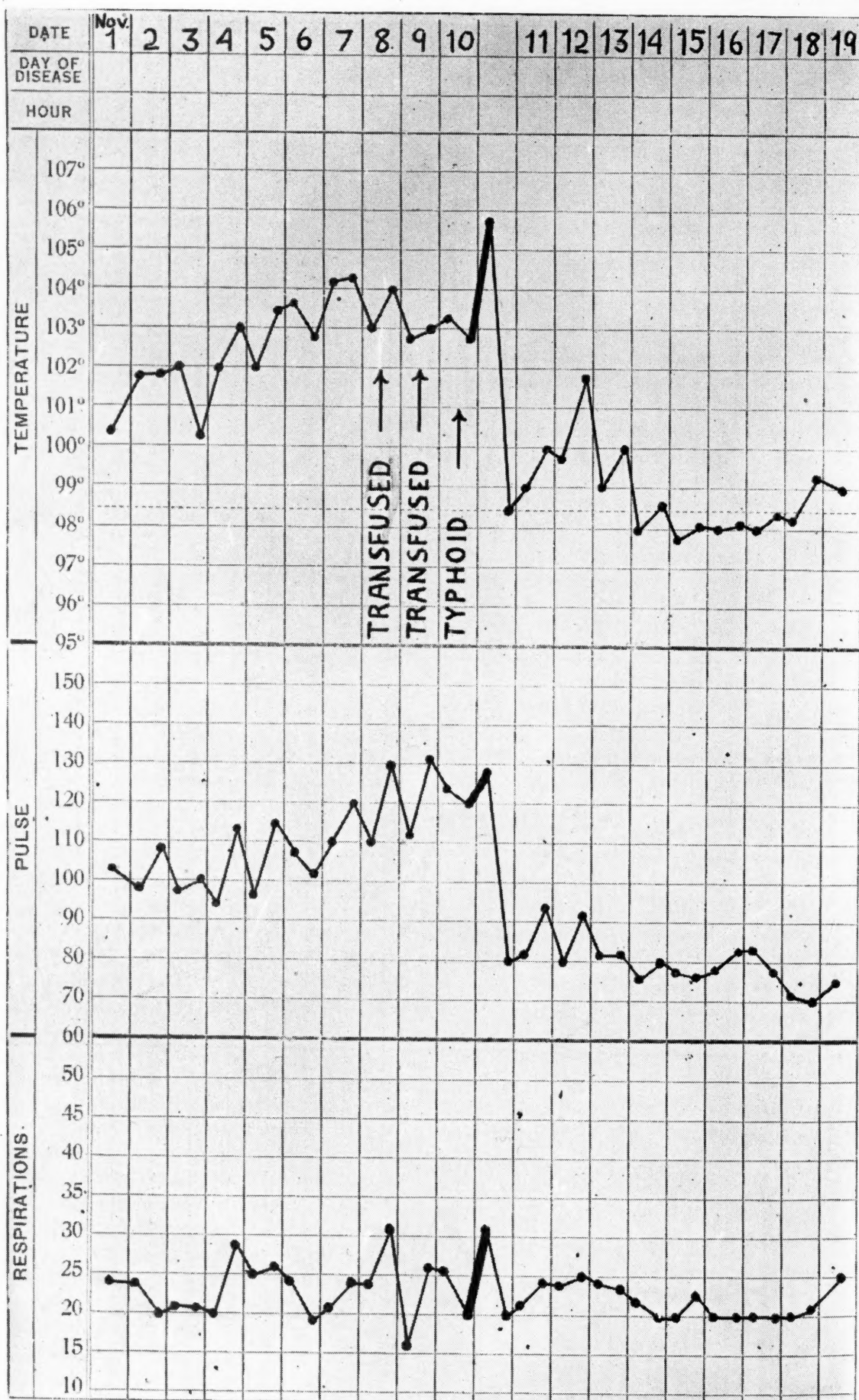
CASE 2. The patient, E. B., a nurse who had just cared for a fatal pneumonia case, entered the ward Nov. 1st with a temperature of 100.4 degrees. On the 8th her respirations rose to 32 and the temperature to 104. On examination there was slight dullness in the right lower back. A chest X-ray confirmed the diagnosis of early pneumonia. She was then given intravenously 300 cc. of citrated blood from a recovered case of influenzal pneumonia. The transfusion was preceded by the withdrawal of 200 cc. of blood. There was no reaction whatsoever and the temperature, pulse, respirations and general condition remained unchanged.

On the assumption that the blood used might possibly have contained fewer immune bodies than did that which was used in the preceding patient, transfusion was repeated on the following day. This time 300 cc. of blood obtained from the same patient whose blood had produced such excellent results in the first case was injected, 250 cc. of blood having first been withdrawn from the patient. Again there was no reaction and again there was no change in the temperature, pulse, respiration or general physical condition of the patient.

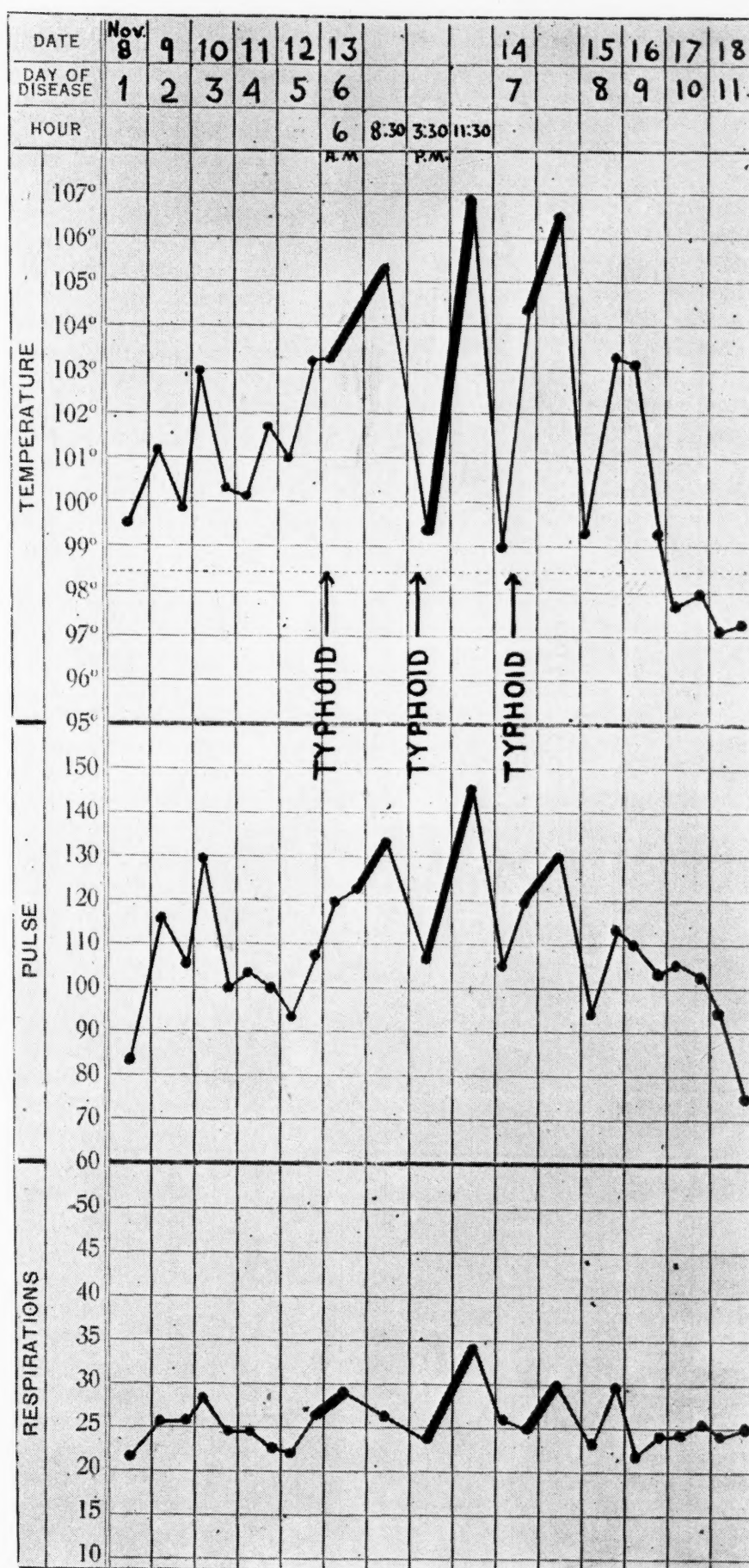
We were led to the conclusion that either the remarkable improvement following transfusion in the first patient was due to a natural crisis coincident with the transfusion or else it was due to the reaction, since transfusion with the same immune blood when no reaction followed caused no improvement. Therefore on the following day, Nov. 10th, the patient was given one billion typhoid bacilli intravenously. One-half hour later she had a severe chill which lasted twenty minutes. Her temperature rose to 105.8 degrees and then fell, in the course of the next six hours, to normal, with a corresponding drop in the pulse and respiration. On the 11th and 12th there was an afternoon rise in temperature to 101.2 degrees and 101.8 degrees respectively. On the 13th her temperature was normal and it remained so until on the 19th when she began to run a septic temperature which was demonstrated by X-ray to



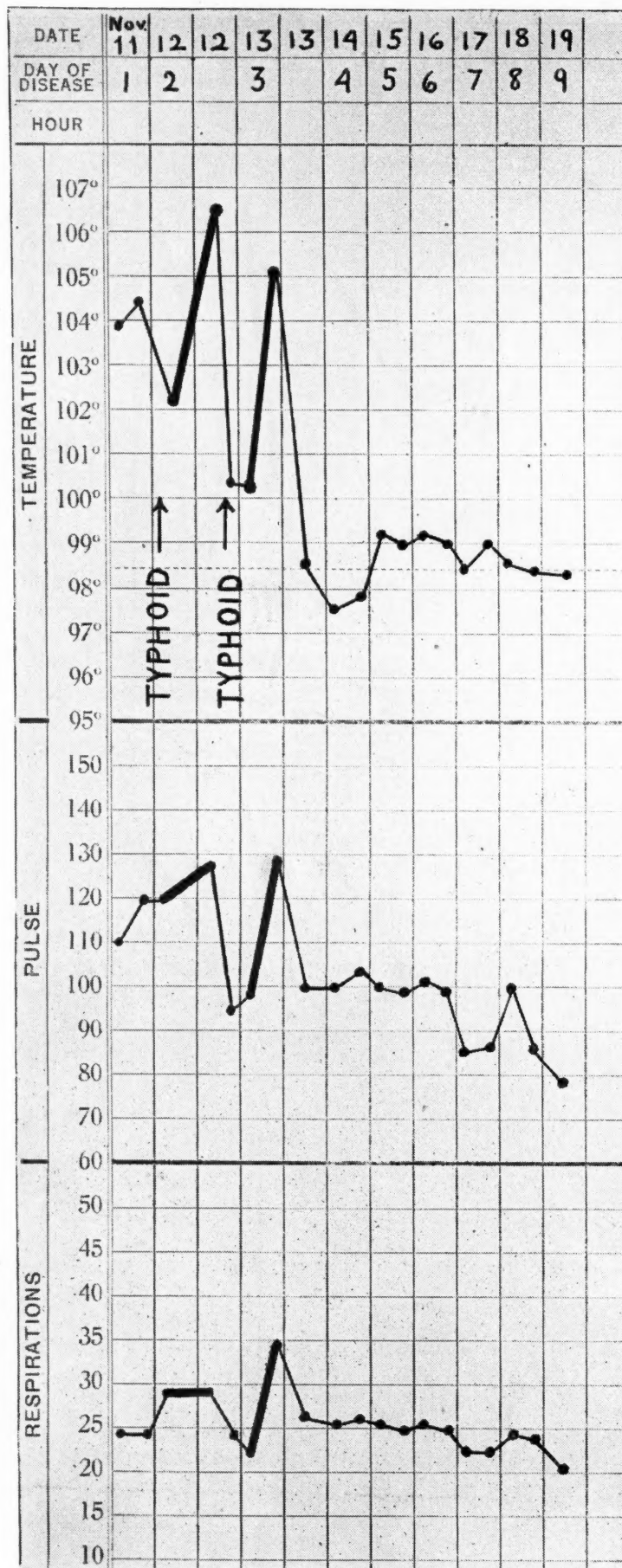
### CASE I.



CASE II.



CASE III.



CASE IV.

be due to lung abscess. Her convalescence was slow because of the complication.

CASE 3. The patient, M. S., a nurse, entered the ward Nov. 8th having contracted influenza while caring for the first patient discussed. Her temperature, pulse and respiration on entrance were 99.5 degrees, 85 and 22 respectively. Her temperature varied from 101 to 103 degrees until Nov. 12th when the chart showed a definite change; her temperature rose to 103.4 degrees and respirations were increased. Careful examination revealed only a few crackles in the left base with no dullness. She was sent to the X-ray room and evidence of beginning bronchopneumonia in the left axillary region with congestion of the right upper lobe was obtained. On the following day an injection of one-half billion typhoid bacilli was given intravenously. Her temperature rose to 105.2 degrees with an accompanying chill lasting twelve minutes. Eight hours after the injection her temperature had fallen to a minimum of 99.5 degrees after which it began to rise. When it had reached 102 degrees she was again given typhoid bacilli intravenously, the dose this time being one billion. The usual reaction with a rise in temperature to 106.8 degrees axillary followed. Six hours after the injection her temperature had fallen to 99 degrees, but inasmuch as the drop was again but temporary, the same dosage of typhoid was repeated. A chill lasting for twenty minutes followed the injection and the temperature rose to a maximum of 106.7 degrees mouth. Subsequently the temperature dropped to 99 degrees but on the following day it rose to 103.5 degrees. Since a post critical rise had been seen in the other cases it was decided to wait before repeating the protein injection. On the following day the temperature had dropped to 99.2 degrees. On the next day it became normal and remained so during the uneventful convalescence.

It is exceedingly interesting to note that in this case definite physical signs of pneumonia could be demonstrated for the first time on the 15th, the day on which she received her last protein injection, and this in spite of the fact that the area involved had been already localized by X-ray examination. Clearly treatment in this case was begun while the process was still central and the degree of involvement slight. We feel that for that reason the crisis was unquestionably hastened.

CASE 4. The patient, a woman, age 24, entered the hospital complaining of cough, pain in the chest and weakness. She had had symp-

toms of influenza for the four preceding days. On examination there was impaired resonance at the left base with bronchial breathing and fine crepitant rales, and a few abnormal signs were present in the right base. The heart apex was one and one-half inches outside the nipple line and a loud blowing systolic murmur heard at the apex was well transmitted to the axilla. On the morning following admission she was given one-half billion typhoid bacilli intravenously. The usual chill followed and the temperature rose to 106.4. During the afternoon she perspired freely, felt very much more comfortable and the temperature dropped to 101 degrees. On the 13th it began to rise again. The protein injection was repeated. A good reaction followed. The chill lasted for 15 minutes and the temperature rose to 106.5 degrees. Two hours later the temperature had fallen to normal and it remained normal during the uneventful convalescence.

#### SUMMARY.

1. A citrated blood transfusion which produced a severe reaction was followed by a drop in temperature by crisis and by prompt recovery.
2. Two transfusions with immune blood which caused no reaction were followed by no change in the temperature, pulse, respiration or general physical condition.
3. When typhoid substance was used and a typical protein reaction obtained there was in each instance a sharp fall in temperature and a dramatic improvement in the patient.
4. These results have led us to believe that non specific protein therapy has a very definite and important place in the treatment of influenzal pneumonia.

#### TONSILLECTOMY TECHNIC.

J. MILTON ROBB, M.D.

DETROIT, MICH.

There is probably no surgical operation more universally done at the present time, than tonsillectomy. This article is not an argument for or against the operation, being so extensively done, but the description of a technic which I have found to be satisfactory.

Two factors are paramount in doing a tonsillectomy:

1. The complete removal of the tonsil.
2. Leaving of the landmarks of the throat in the most normal condition possible.

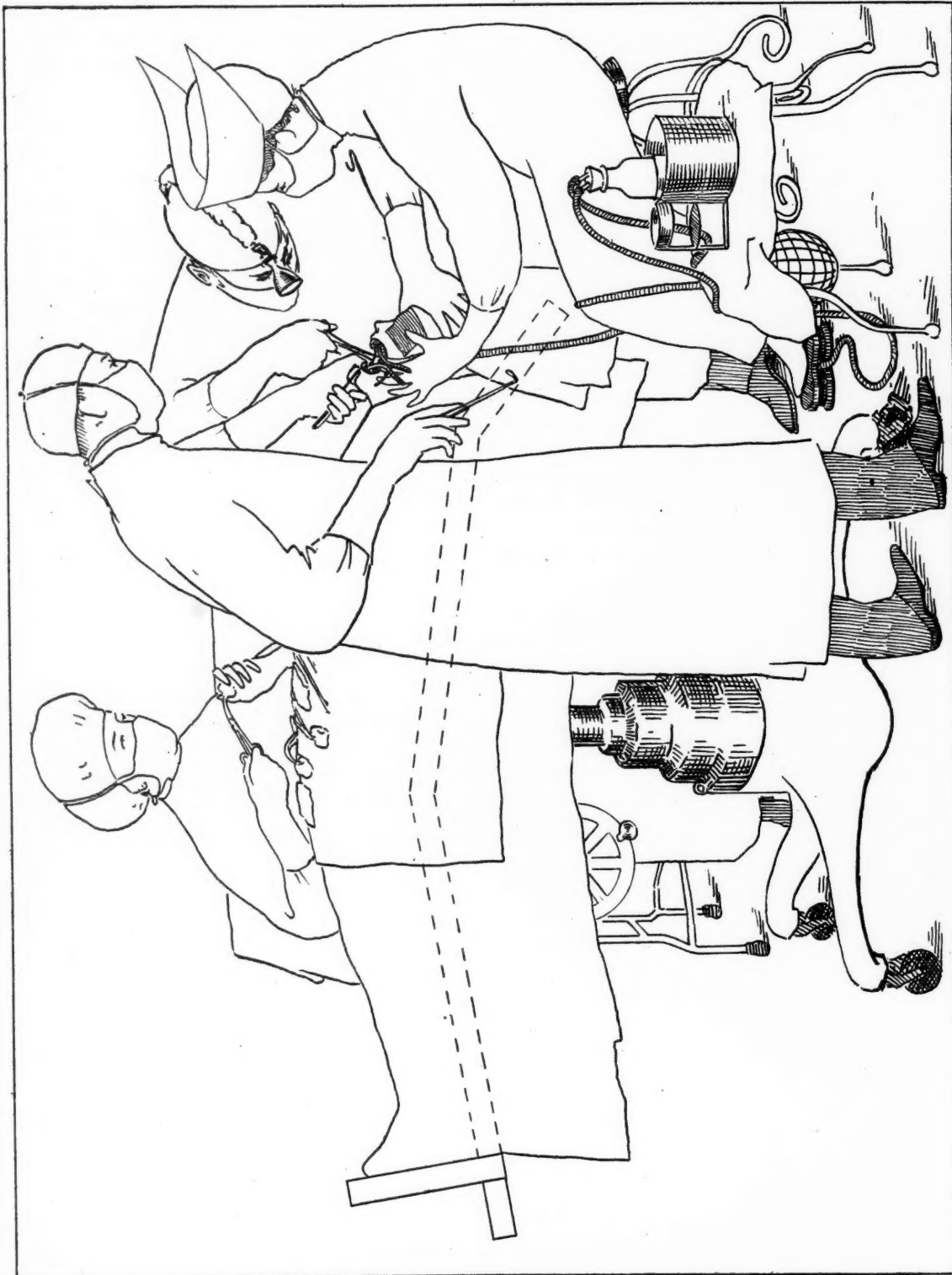
Other factors:

- (a) Prevention of operative and post-operative hemorrhage.

(b) Prevention of lung complications due to aspirations.

As to the first, I believe it will be generally conceded that a partial tonsillectomy is worse

As to the second: The amount of disturbance in the physiological action of the muscles of the throat in speaking, singing, swallowing and general comfort, by mutilation of the pil-



(PLATE I.) Showing position of patient (table) during operation.

than none at all, in fact it has produced complications twice as frequently as tonsils never removed, according to reports from investigation at Johns Hopkins Hospital. (*Bulletin, Johns Hopkins Hospital, January, 1917.*)

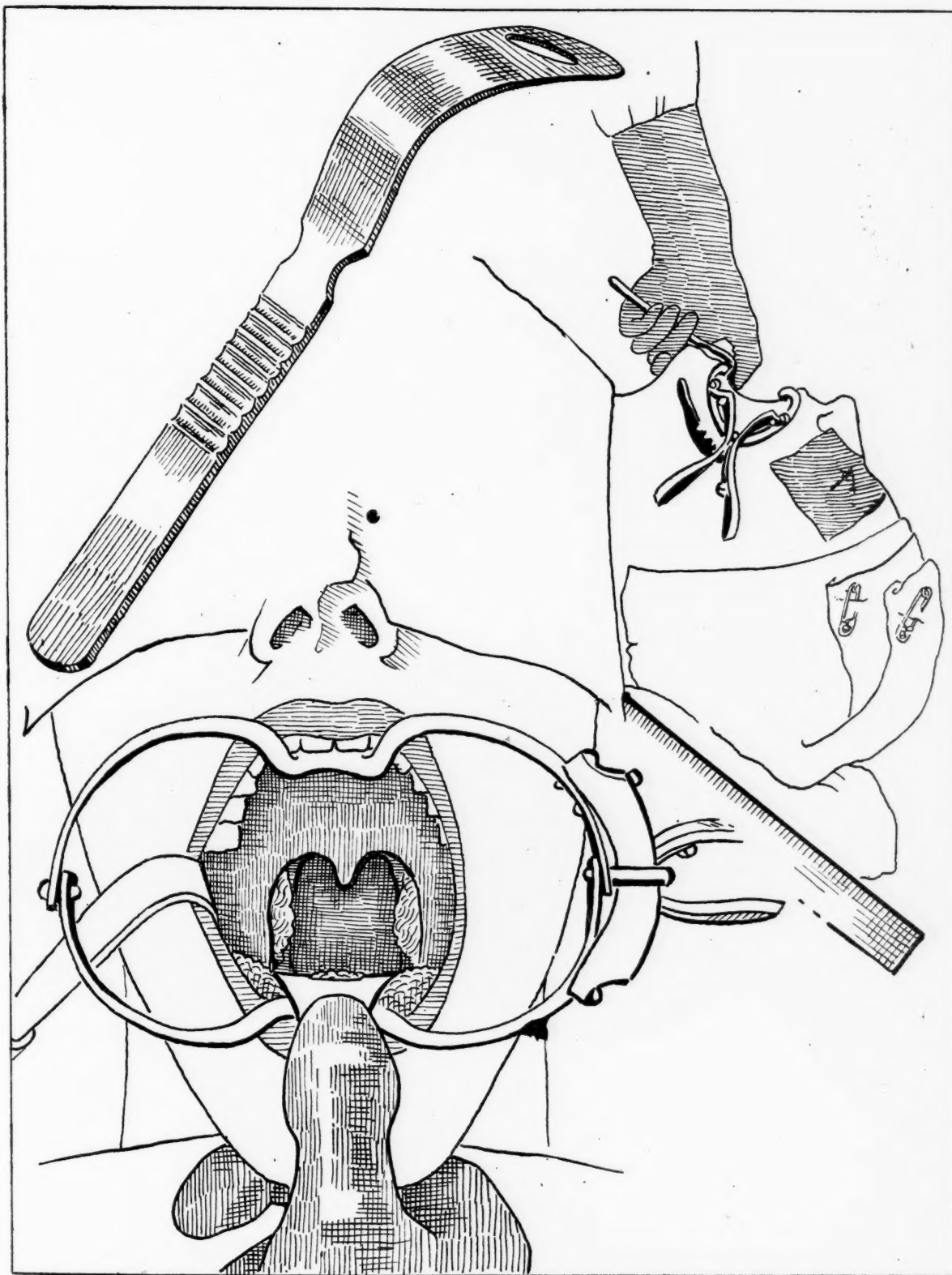
lars, and soft palate, cannot be definitely stated. I have had my share, but with the development of this technic, mutilation of the throat is rapidly becoming a negligible factor.

Out of my last two thousand cases, I have

had 2 per cent. postoperative hemorrhage which required attention after returning the patient to the room and this mostly in patients between

local with a punch at the office.) I have had no lung complications.

*Technic.*—(Under general anesthesia).



(PLATE II.) Position of jaw and tongue as under best control by the grasp.

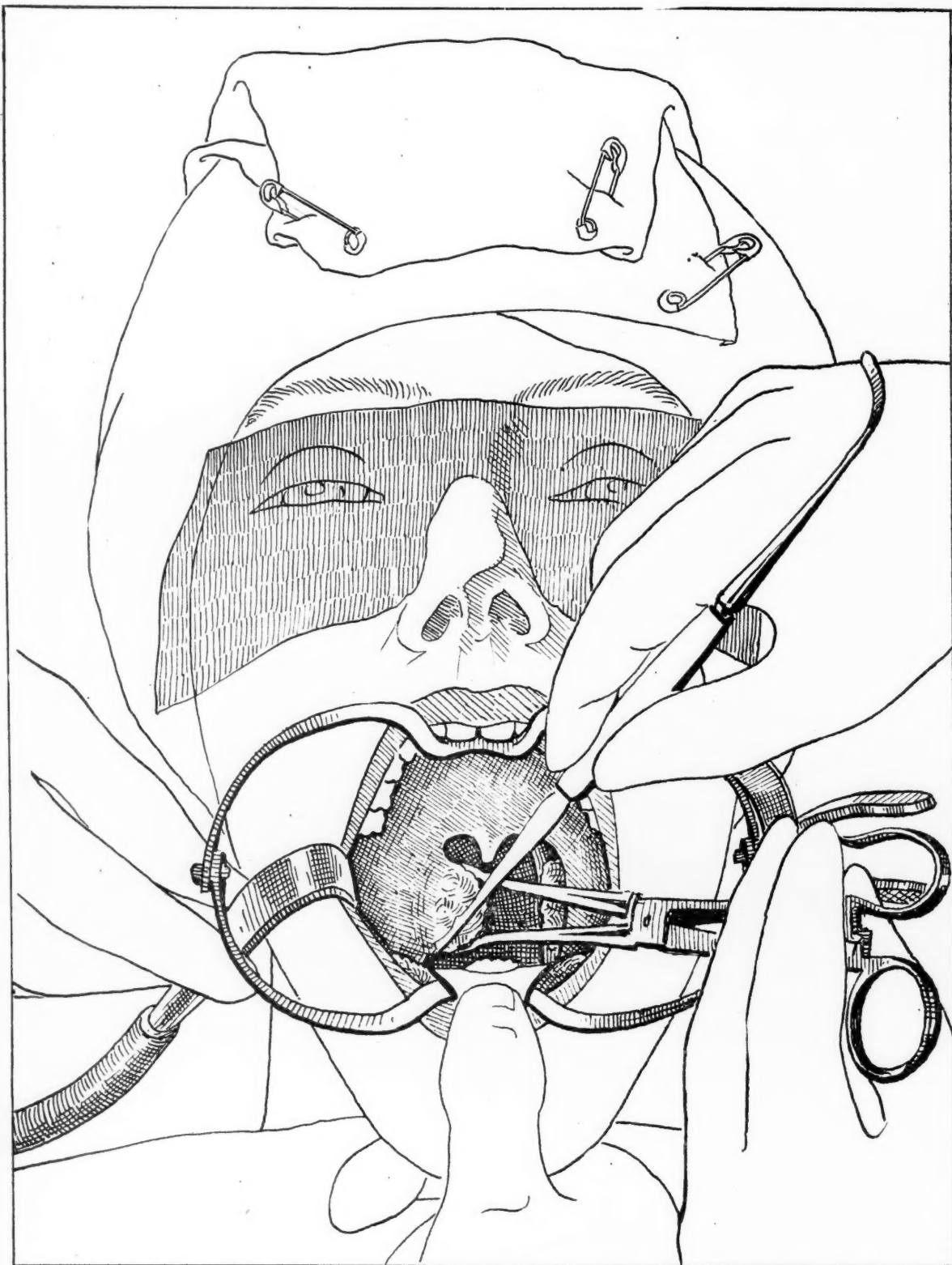
50 and 70 years of age, in which locals were done and one-half of one per cent. in which tonsil tissue remained. (This I remove under

#### I. Anesthesia.

As a rule none but deep anesthesia is sufficient because:

(a) Muscular action through swallowing and straining enhances bleeding by milking the blood from the patent vessels.

use of an aspirator, for the reasons, first that it tends to prevent clotting by drawing blood from the vessels and second I do not find it



(PLATE III.) Beginning incision at insertion of palatoglossus muscle with tongue.

(b) Careful dissection and good breathing demands control of these muscles.

I might state here, that I do not favor the

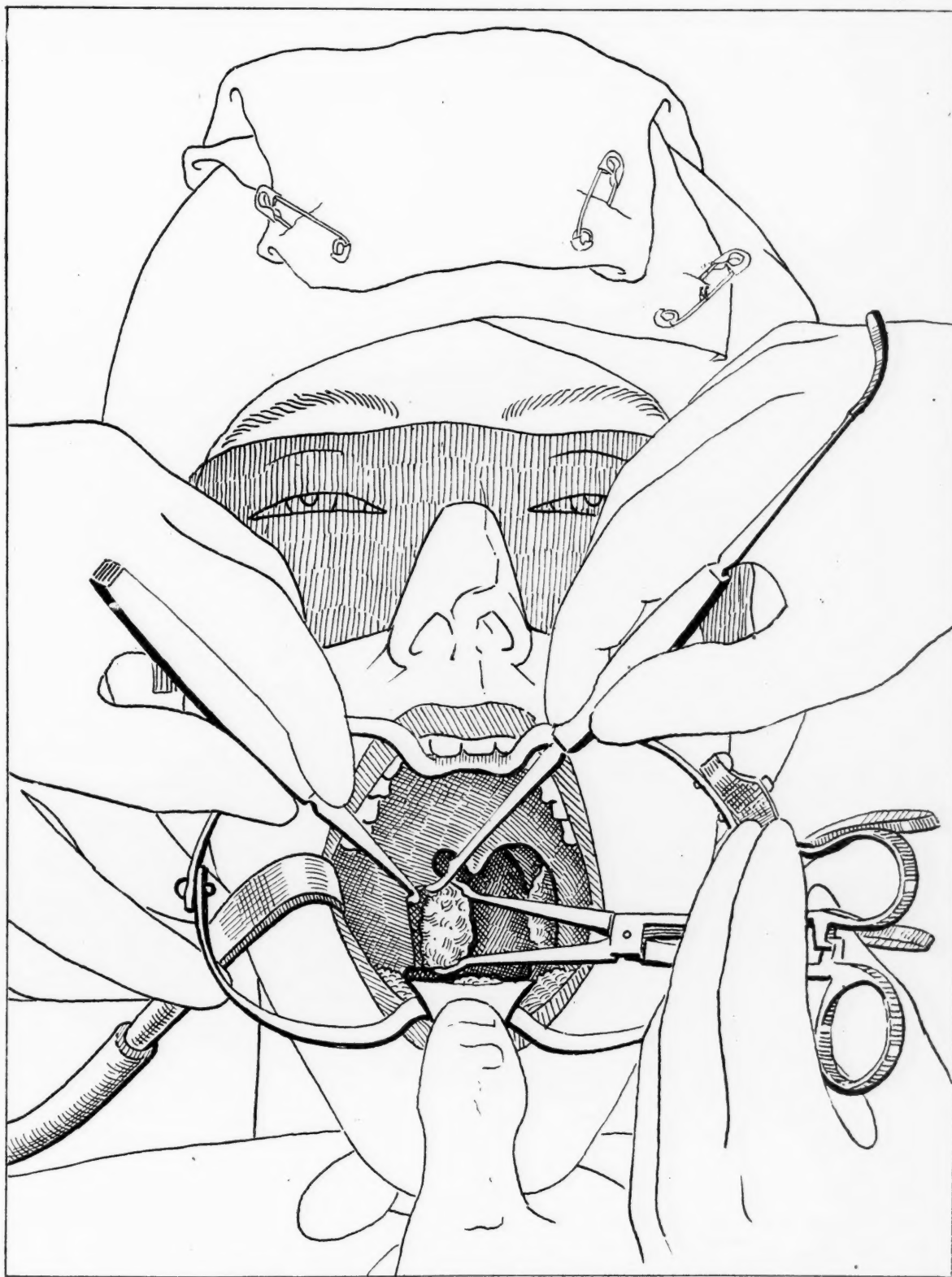
necessary unless I am doing some other work on the mouth or nose with profuse hemorrhage.

After the jaw is sufficiently relaxed to admit

the mouth gag, anesthesia is continued by use of the Fellie-Brown apparatus.

II. Position of table (Plate I.)

when ready for operation the head of the table is further lowered to an angle of about 135 degrees. This position causes all mucus, blood,



(PLATE IV.) The assistant holds the pillar taut with the dull dissector.

After the patient is fairly under the anesthetic the upper one-half of the table is tipped down to an angle of about 160 degrees and

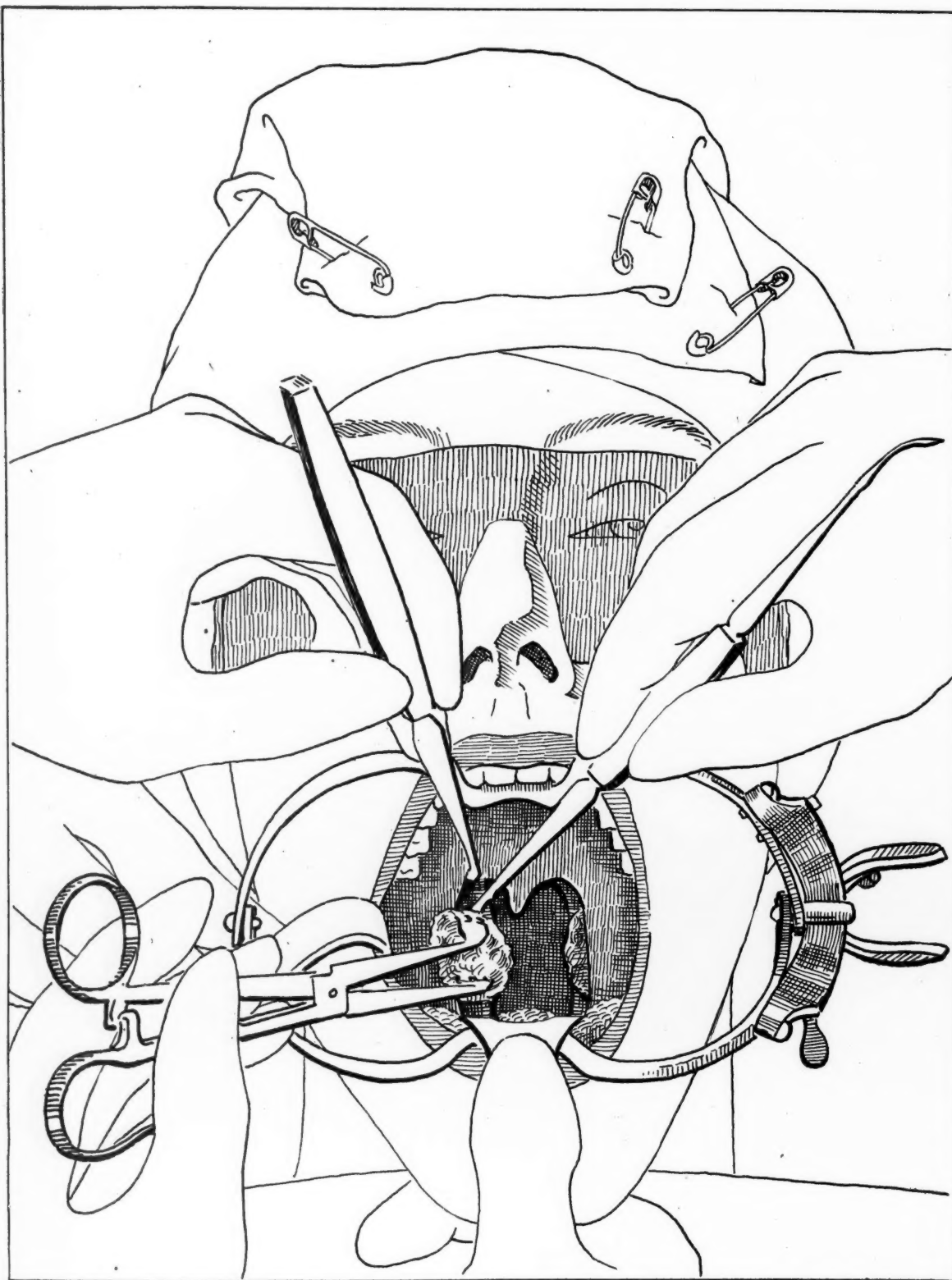
etc., to gravitate to the mouth, where it is readily swabbed out instead of being aspirated into the lungs. This also gives the best posi-

tion and largest space to the operative field, and likewise renders convenient and safe the drainage and washing of the maxillary sinuses,

this subject will be dealt with in another article.

### III. Position of Jaw. (Plate 2.)

The accompanying illustrations are quite self-



(PLATE V.) Continuation of Plates 3 and 4.

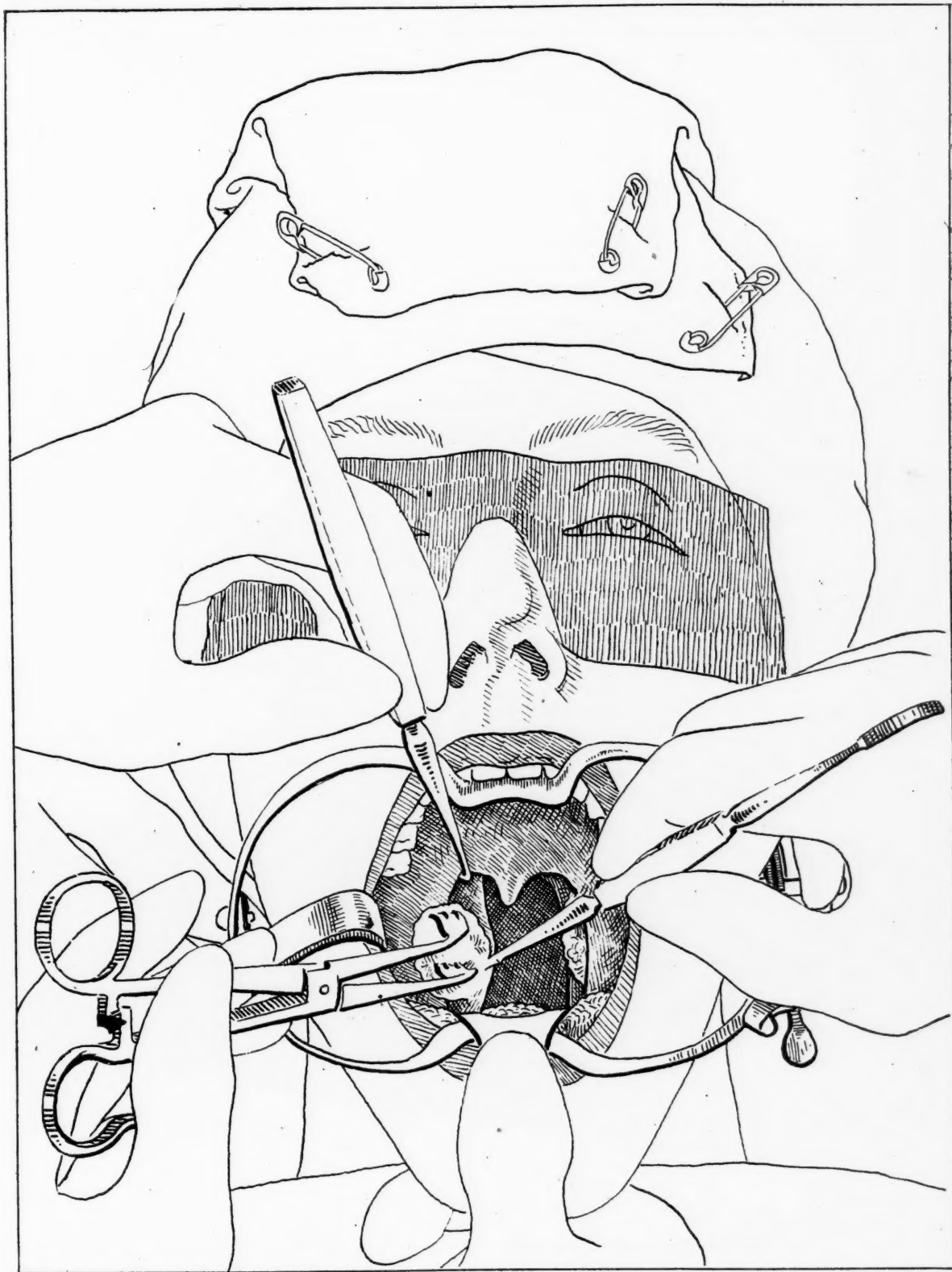
which I find indicated in about 25 per cent. of adults whose "Catarrhal" nose and throat conditions bring them to tonsillectomy. However,

explanatory. The jaw is held easily up and in position for the best breathing, the field is in best view, and the tongue depressed. This posi-

tion is essential to good control, and I require the assistant to maintain it.

IV. Operative Procedure. (a) (Plate 3.)

the anterior pillar close to the edge and always at the insertion of the palatoglossus muscle with the tongue. I then turn the sharp dis-



(PLATE VI.) Separation of posterior pillar while both pillars are held taut.

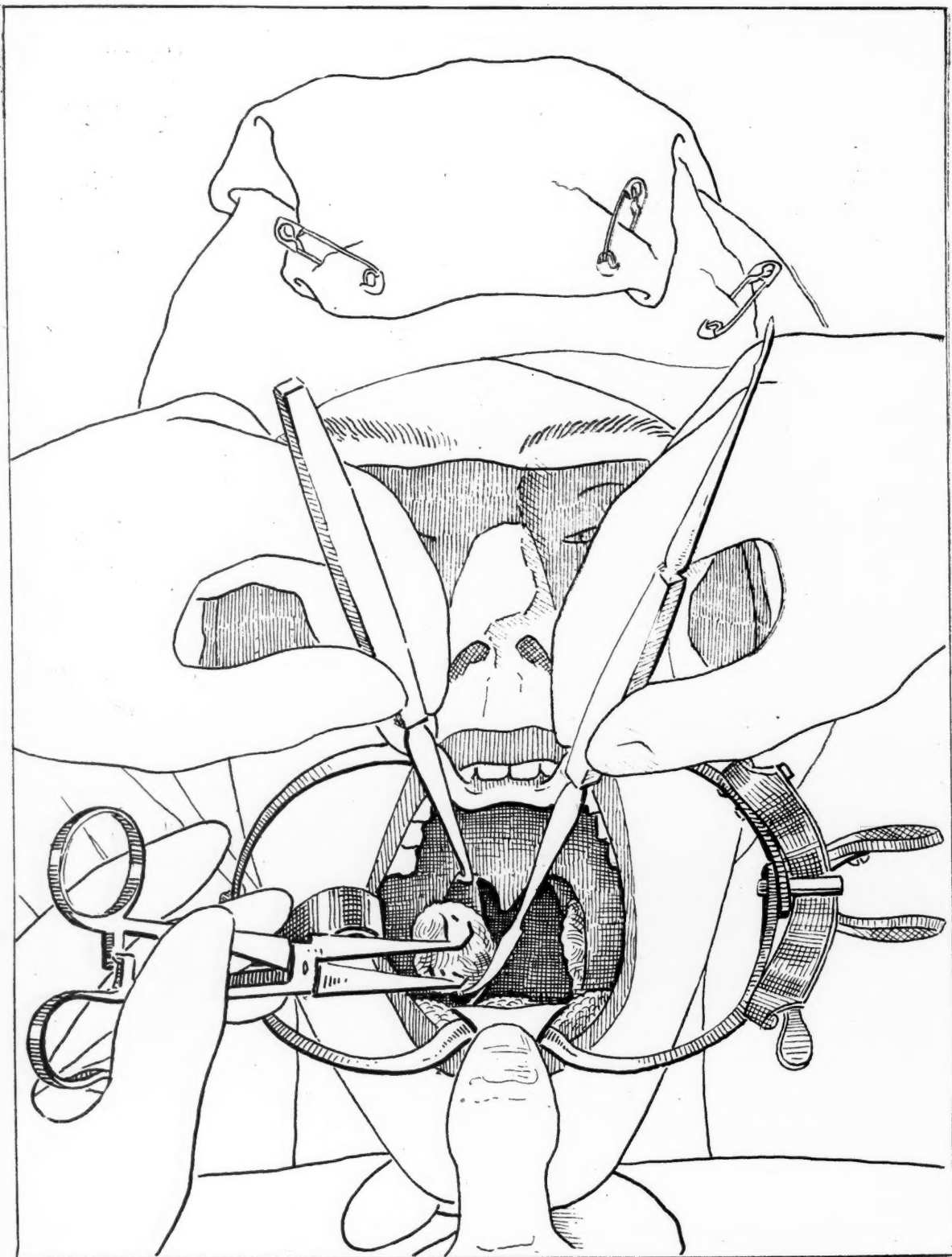
After grasping the tonsil firmly, being careful to avoid including either pillar, with the instrument illustrated, I enter the margin of

sector sidewise, unless scar tissue demands the sharp edge, the assistant inserts the crooked dull dissector and follows the sharp dissector

in the incision upward, holding the pillars tense, which allows of control of the position of the incision. (See Plate 4).

and I separate it from the tonsil, by an incision downward to the lower pole. (See Plate 6.)

If the pillars are held taut, as described, it



(PLATE VIII.) Further separating tonsil after incision.

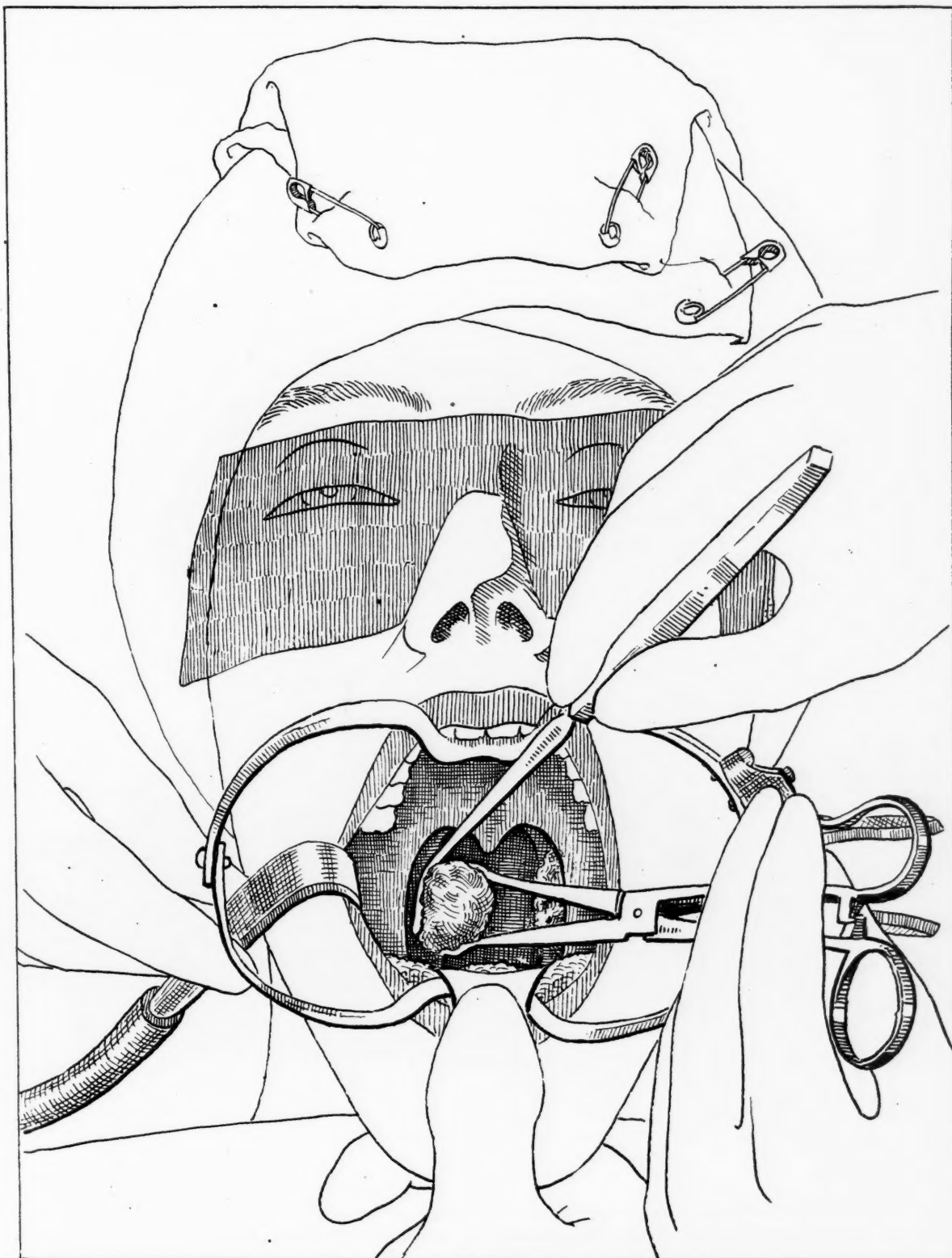
Having reached the upper pole the assistant holds both pillars tense, the tonsil is tipped outward, the posterior pillar comes into view

is practically impossible to mutilate them, which has always been one of the postoperative disturbing elements of tonsillectomy. We all know

the final appearance of the throat after it which under best circumstances is not always ideal.

The tonsil main points of attachment are

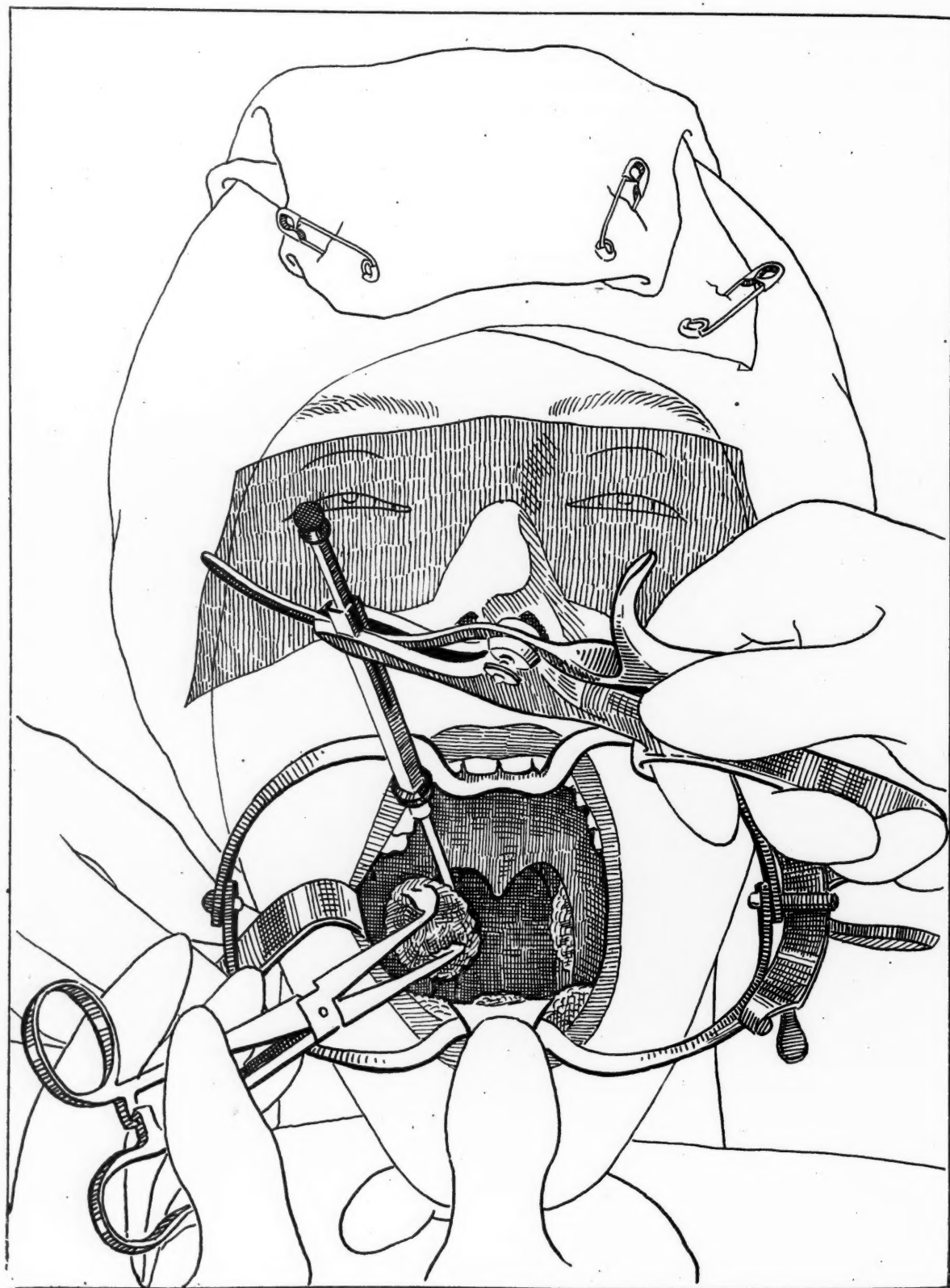
pillars about the tonsil. If a partial tonsillectomy has been done or if there is much scar tissue, from repeated tonsillitis or quinsy, the



(PLATE IX.) Separation of tonsil near base with dull dissector only, to prevent cutting into tonsillar plexus of veins.

at the borders of the pillars and at the hilus, therefore, the main work of dissecting is finished after the incisions through the margin of the

attachment of the pillars to the tonsil will be far more extensive which only further emphasizes, however, the need of a definite routine

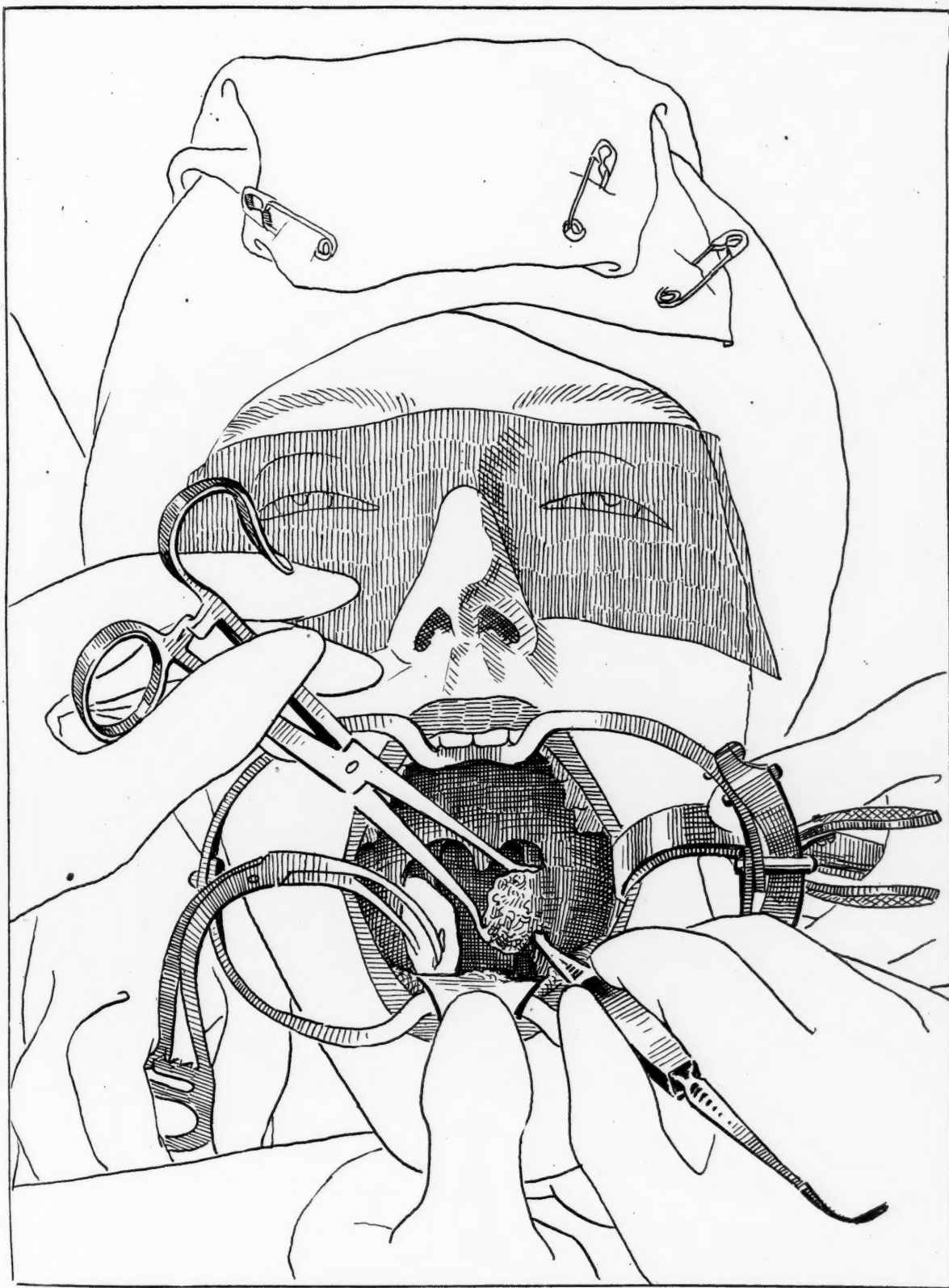


(PLATE X.) At this stage there is very little danger of the snare cutting through either the capsule of the tonsil or the fascia of the superior constrictor muscle.

method of dissection.

After the margin of the pillars has been separated as above, I use the curved or dull dissector or both to further enucleate the tonsil if necessary. (Plate 8, 9 and 10).

The above procedure allows the snare wire to draw into the area of cleavage between the pillars and the capsule and almost invariably it will follow this course, leaving the pillars intact and keeping outside of the capsule, thus



(PLATE XII.) Resecting the left tonsil. Note that the Felle-Brown is brought over to the left side of the patient. Note also the pad clamped down in the bed where the right tonsil was resected and that it is held in place by the assistant who is administering the ether with the Felle-Brown. Otherwise the detail is the same as is explained in Plate 3.

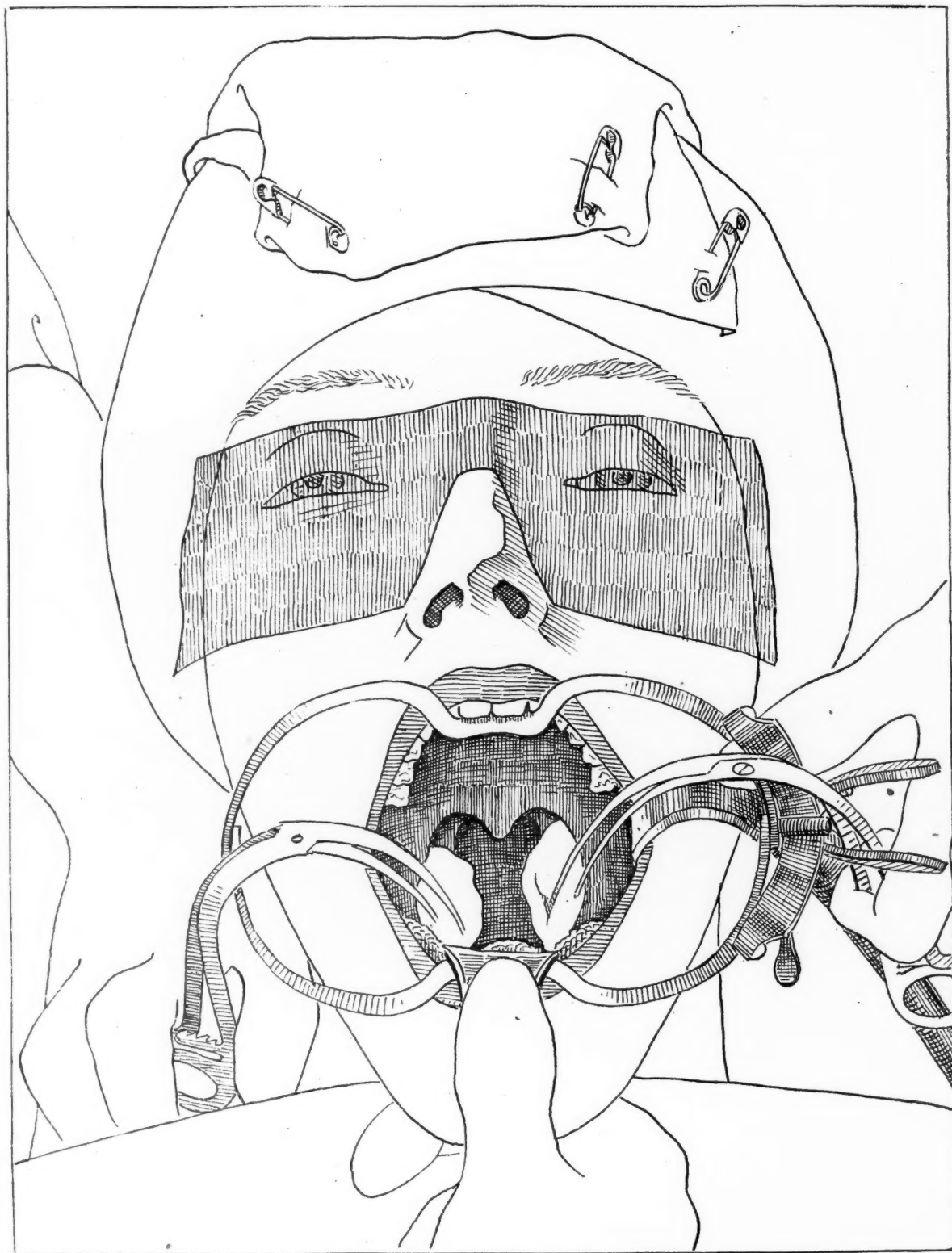
removing the entire tonsil, and of equal importance, preventing the snare cutting through the fascia of the superior constrictor muscle of the pharynx, just beneath which lies the tonsilar

plexus of veins. (See Plate 14 and 16).

This plexus can readily be seen in nearly every case lying in the floor of the fossa beneath the fascia. (Plate 14) is a reproduction

from Davis, applied anatomy, Page 113, Fig. 142, and Plate 16 is an exaggerated drawing of the plexus as it appears after the tonsil is re-

(Gray) the close proximity of which may account for considerable pressure at the point and this fact emphasizes the necessity of preventing



(PLATE XIII.) The Bergeron forcep in position both sides.

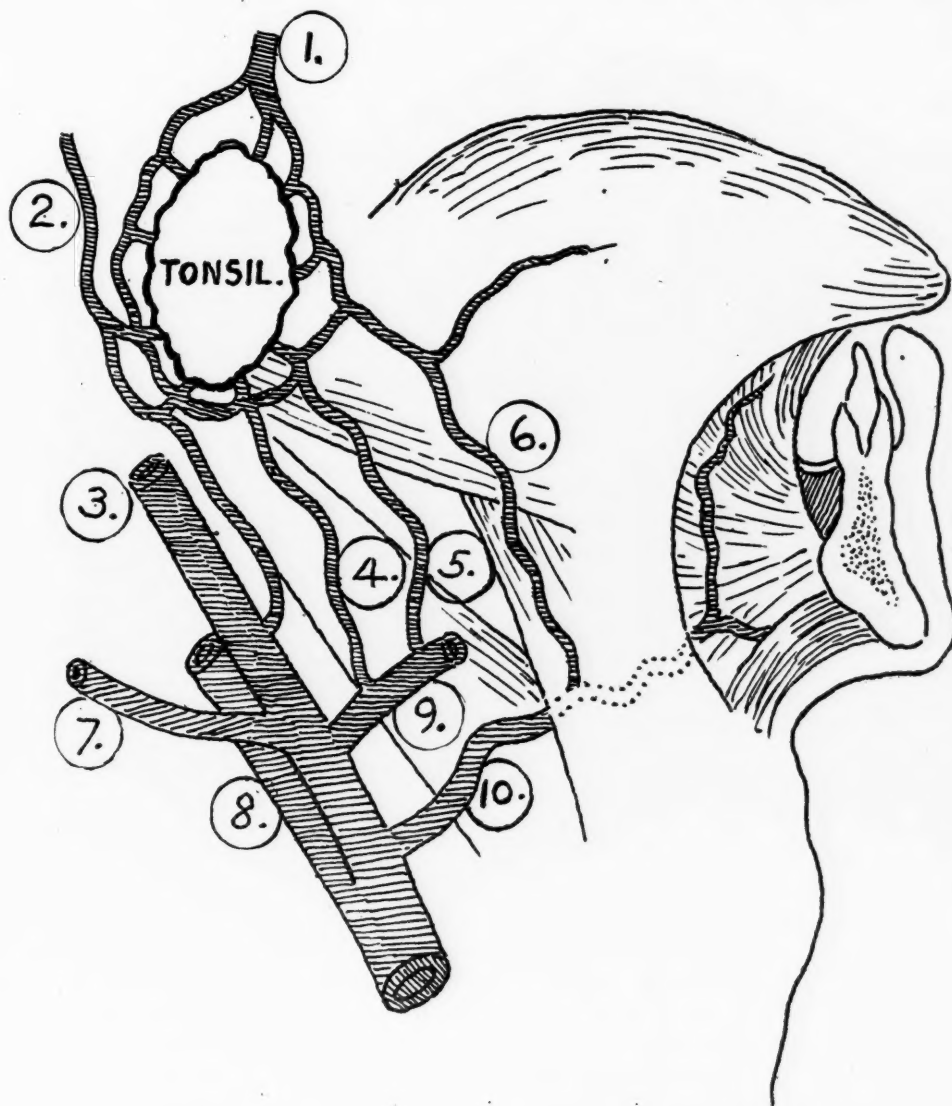
• moved. The tonsilar plexus of veins communicates directly with the pharyngeal plexus and with the pterygoid plexus of the internal juglar

increased pressure by reason of patient straining if not well anesthetized. Hemorrhage after tonsillectomy is almost invariably of the oozing

type, which would make it appear to be venous in origin, however, the several arteries feeding the tonsil form almost as complicated a plexus and would be a more dangerous one were it not that they lie deeper, and bleeding from them is so evident it is usually controlled before the patient leaves the table.

The main blood supply of the tonsil enters

removing the left tonsil in similar manner. (Plate 12). Following another Bergeron forcep is placed in the left fossa, (Plate 13). These are held in place for about five minutes, which is about the required time for the blood to coagulate in the field as shown by experience. I usually insert a catheter into the nose and out of the mouth to elevate the soft palate for



(PLATE XIV.) Diagram illustrating the blood supply of the Faucial Tonsil.

- (1.) Descending Palatine.
- (2.) Ascending Pharyngeal.
- (3.) External Carotid.
- (4.) Ascending Palatine.
- (5.) Tonsillar.

- (6.) Dorsalis Linguae.
- (7.) Occipital.
- (8.) Internal Carotid.
- (9.) Facial.
- (10.) Lingual.

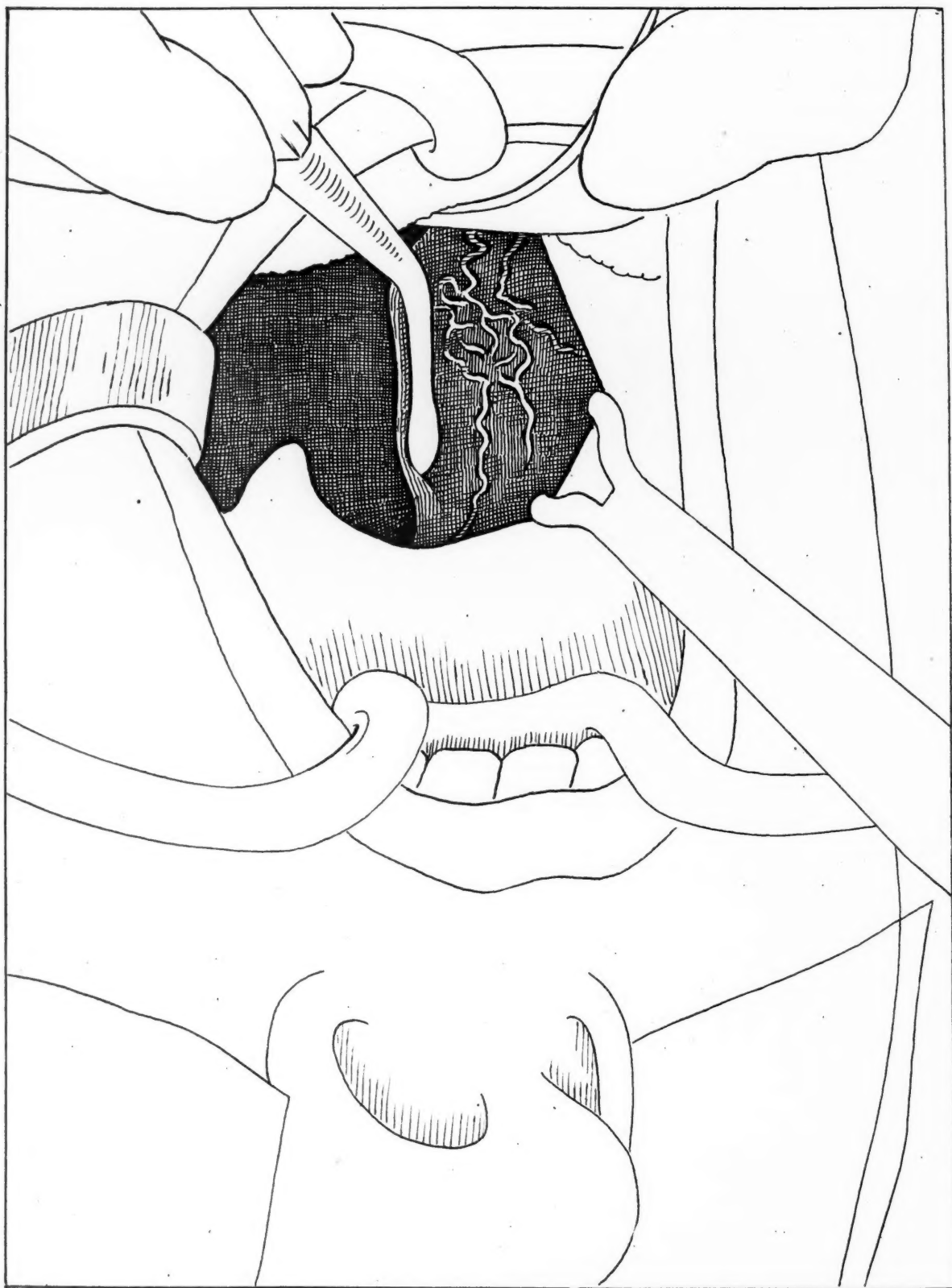
This diagram is reproduced from "Applied Anatomy." By G. G. Davis. Pp. 113, Fig. 142.

at a comparatively small point and ordinarily the snare does little cutting if started right until it gets to them.

Immediately after the tonsil is removed the assistant inserts the curved Bergeron forcep with a sponge, large enough to tightly fill the tonsillar fossa. This is held in place by the anesthetist while I change to the other side

investigation of the pharynx, which can usually be done while the Bergeron forceps are still in place, or the maxillary sinuses may be opened while waiting if indicated.

I have seen no method which permits of so little bleeding, and except for bleeding from the adenoid field, very often the only sponging necessary is for mucus. I find a very satis-



(PLATE XVI.) Exaggerated view of the tonsillar plexus of veins after the tonsil is removed. The anesthetist changes the Fellie-Brown mouth part on the opposite side as a retractor of the lips.

factory method of lessening hemorrhage from the adenoid space to be to immediately pack a piece of loose gauze into the pharynx as soon as the adenoids are entirely removed. This pack I remove just before the mouth gag is

taken out.

Some possible objections to this routine.

1. It may appear complicated and to require too much time. It does not, the very routine makes it rapid. In point of time second

to no other method commensurate with a certainty of satisfactorily completing the operation.

2. Requirement of an assistant, and double hinged table. Both are essential, and I also employ an instrument nurse who is of great help especially in point of time. There are many circumstances in which these are not all available, but I think that in the average hospital they can be available, and as to operating in homes and office, there may be times when it is unavoidable especially, in vicinities where there are no hospitals, but I am sure the results we see discourage this most emphatically.

With the apparent increasing evidence of the value of tonsil and adenoidectomy, the need of a most careful inquiry into the best methods cannot be too strongly emphasized, and I think the time should come when every county or group of counties of every state should be furnished with hospital facilities at government expense, where ordinary surgery can be taken care of, thus doing away with the excuse of lack of facilities. But this is a subject for other discussion.

641-45 David Whitney Bldg.

#### STATE BOARD OF HEALTH.

##### VENEREAL DISEASE DIVISION.

G. M. Byington, M.D., Director.

In November, the question of the suppression of syphilis and gonorrhea was for the first time brought forcibly to the attention of the Michigan State Dept. of Health, as a public health problem, and an issue second to none in importance. The results of the first draft did this. So many men were found infected with venereal disease that some program of action became a matter of patriotic necessity.

The Michigan War Preparedness Board recognized this and has made the campaign financially possible. Michigan has the distinction of being a leader in this national movement for the suppression of venereal disease, having had a very definite plan in operation several weeks before the federal government requested co-operation from the states.

It may be briefly summarized as follows: 1. To treat all infected persons. 2. To clean up conditions of environment tending to increase the spread of the infection. 3. To protect the not yet infected persons. It was started as a war measure, but peace has intensified the need for action.

In November, 1917, the State Dept. of Health declared syphilis and gonorrhea dangerous communicable diseases, which places them on a plane with smallpox, diphtheria and tuberculosis. They are now reportable and quarantinable, by law. The source of infection is also reportable. Patients are given the choice of hospital or home quarantine, home quarantine carrying with it the red quarantine card, now more or less familiar in urban localities. The State pays all expense of hospital treatment.

Through the co-operation of established hospitals, the patients have the use of 286 beds and the medical attention of the best specialists the State affords.

In addition to the hospital care, clinics are being established throughout the State to treat the cases not needing hospital care and to continue treatment of the discharged hospital cases.

#### SOCIAL SERVICE DEPARTMENT.

Katharin Ostrander, Director.

When the State Board of Health began the treatment of venereal diseases, it felt the need of some social supervision of patients to insure their conducting themselves in a manner to prevent reinfection. To meet this need, the Social Service Department was organized, its duty to be the after-care of all women who have received treatment from the State for venereal diseases. To make this after-care possible, workers have been appointed in each city where the State gives hospital treatment, and in each city or county from which large numbers of girls have been and are being apprehended.

Rather an elaborate program furnishing occupation and recreation for the interned women patients is now in operation in all the hospitals. This part of the work reacts most favorably on the patients.

Mental examinations have proved to be an important part of the work. The routine of these examinations have become so heavy that the co-operating psychopathic clinics which first made the work possible can no longer give it the necessary time; therefore the State Dept. of Health has decided to centralize the psychopathic work in a State psychopathic clinic under the Social Service Dept. The services of a full-time psychologist, a field worker and a secretary have been engaged, whose duty it is to see that all State women venereal patients be given mental examinations during the time they are receiving treatment.

Since the psychopathic work was established, until January 1, 1919, 711 cases have been examined. Of this total number, approximately 79 per cent. are psychopathic to some degree, 24 per cent. of them are feeble-minded, needing institutional care, 3 per cent. are insane or epileptic, 10 per cent. normal. For the 10 per cent. normal women, we anticipate complete and permanent rehabilitation. For the mental cases we will be able to bring about only such social changes as they are capable of accepting. Most of them can be kept at remunerative occupation and be made self-supporting under constant supervision.

All cases of feeble-mindedness and insanity are handled legally as well as medically and every effort is made to place such patients in permanent custody.

Nine hundred and thirty-two women are or have been under treatment, to January 1, 1919. Of this number, 354 are now under observation, the others having been returned to legal residence in other states, placed in institutions for permanent or temporary care or otherwise arranged for.

#### EDUCATIONAL DEPARTMENT.

Marjorie Delavan, Director.

The educational work of the venereal campaign is in charge of a director, with an advisory committee of five women. The work is carried on by lecturers, pamphlet material, exhibits, placards and posters. The lecturers are both men and women and, with one exception, are physicians. They have talked to all types of audiences, women's clubs, high schools, colleges and normals, farmers' institutes, conventions, mass meetings, factories, business colleges, department stores, church services, industrial schools, business clubs and prisons. Between three and four hundred such lectures have been given, both in the upper and lower peninsulas. There are seven full-time and ten part-time speakers now on the staff and additions are being made frequently. The lecturing staff will eventually include men and women in all parts of the State, ready to fill single requests in their territory, thus obviating the present necessity for long trips. The lecturers talk from a syllabus, designed for the group to be addressed, but latitude is allowed

in their individual treatment. All speakers are sent free of charge.

The distribution of pamphlet material has developed into an important part of the educational campaign. Nine pamphlets are now in use and approximately 350,000 have been sent out. There is no wholesale distribution. A large percentage of the pamphlets have been sent upon individual request and the remainder to group organizations.

A bibliography is issued, listing the best non-technical books on various phases of social hygiene, and the books are sold through the department.

Exhibit work is also developing rapidly and will mean much at county fair time in the fall.

Translations into Finnish, Swedish, Polish and Italian are being arranged.

Posting of placards, framed and under glass, is being carried on continuously and several thousand have been put in the public waiting rooms of the State.

The development of the educational work shows more and more definitely the need. People have to be told of the importance of the venereal disease problem and how it can be met. The response is more than enthusiastic.

---

#### SURGERY OF THE STOMACH.\*

GEORGE M. TODD, M.D.  
TOLEDO, OHIO.

Modern stomach surgery is not more than thirty years old. Bilioth in 1881, published a report of four resections of the pylorus for cancer. Wolfer in the same year performed his first Gastro-enterostomy. This operation which has been the most frequent operation upon the stomach had a very stormy period until arriving at the present perfected form.

The usual operation upon the stomach is gastrostomy, which is indicated when for some cause it is necessary to feed directly into the stomach, such as cancer of the tongue, cancer of the oesophagus and cardiac end of the stomach, or stenosis from swallowing injurious chemicals.

Gastrotomy for the excision of ulcers and control of hemorrhage removing benign growths

---

\*Read at meeting of the Monroe County Medical Society, Dundee, Mich., May 1st, 1919.

and the removal of foreign bodies which cannot be removed by esophagoscopy.

Gastro-enterostomy, the most useful and frequent of all operations upon the stomach, is indicated for ulcers of cardia, anterior and posterior surface. Ulcers of the lesser curvature. Ulcers of the pyloric region and ulcers of the duodenum, stenosis of the pylorus and dilation of the stomach.

Plastic operations upon the pylorus are used in congenital pyloric stenosis and in stenosis from pyloric ulcer.

Resection, either partial or total for cancer.

Ulcer and cancer are the most common of all stomach disturbances. Cancer is claimed to involve the stomach in thirty per cent. of all kinds of cancer that affect the human body. Syphilis, sarcoma and tuberculosis are factors in surgical stomachs, but occur so seldom that they are rarely considered.

As one meets the surgical stomach so frequently, to successfully manage them, certain definite facts must be in mind as a satisfactory working basis. Ulcer symptoms may spell cancer and cases thought to be cancer are ulcer. It is therefore necessary to have in mind this uncertainty all the time. It has been held that cancer frequently develops on an ulcer base, this has been disputed by leading pathologists who claim that the ulcer develops on the surface of the cancer. I am inclined to hold to the older view and believe that every ulcer is a potential cancer.

Persistent pain, local and general, over the region of the stomach and the duodenum. Persistent sour stomach, tenderness over the stomach and duodenum. Vomiting, with or without blood, should point to a more extended examination, in which the laboratory and the X-ray are called to our aid to differentiate between ulcer and cancer. No dependence can be placed on the presence or absence of hydrochloric acid, as we have seen cases with well marked cancer maintain acidity, the explanation being the presence of both ulcer and cancer. The X-ray presents well defined distinction between ulcer and cancer.

After the usual barium meal, a diagnosis of cancer may be made of the filling defects present inwards, that is, impinges upon the lumen of the stomach, or a diagnosis of ulcer made if the defects extend outward and do

not project into the stomach cavity. Of course other more extensive consideration must be given, such as peristalsis, mobility and the filling of the duodenal cap.

The following case will illustrate the difficulties in diagnosis: a man of 45 had been well until four months previous to the time I saw him. His symptoms were pain in the stomach, following eating. Persistent sour stomach, vomiting of blood. Three pints of fluid were lavaged at the first examination, which was six hours after eating. Ewald test meal showed hydrochloric acid in excess and the absence of other chemical substances indicating cancer. X-ray Barium meal, marked outward filling defect. History, physical examination, laboratory findings, X-ray, all pointed to ulcer of the stomach.

Operation, no adhesions, great thickening of pylorus with stenosis. Wide excision, posterior gastro-enterostomy. Microscopical diagnosis, adeno carcinoma.

To those who advocate extended medical treatment for ulcer, I commend the careful consideration of this case. This man is well and happy today. A number of similar cases could be narrated, but this, I think tells the story.

In the history of medicine, we have no recorded example of cancer of the stomach cured by medical means. A study of the history of surgical treatment and the statistics of results show how favorably cancer of the stomach treated by surgical means compares with the surgery of cancer in other parts of the body. A suspicion of cancer of the stomach which cannot be disproved should lead to a surgical diagnosis and exploration.

Gastro-enterostomy is the operation of choice in ulcer and in no class of surgical cases can I point with as much pride as I do to these. The mortality has not been high and the relief offered great. In not a single case of positive ulcer has cancer been an after factor. My experience with this operation covers a period of fifteen years, many are living and well. Are living their usual lives, with little or no attention paid to their stomachs or diet. The most benefit from this operation results in cases of pyloric stenosis, with retention and in dilated stomachs, although in other cases, such as ulcers in the lesser curvature and near the cardiac, splendid success has been achieved. The cure,

we believe to lie in the fact that the acidity of the stomach has been changed and reduced to alkalinity by regurgitating biliary and pancreatic secretion from the bowel in the stomach.

Just a word as to the perforation of ulcers and gastric hemorrhage. The former always calls for excision of the ulcer and posterior gastro-enterostomy, this condition and operation has been followed by a high mortality owing to the period of time that elapsed between perforation and operation.

As to the bleeding ulcer, operative interfer-

ence is indicated when the hemorrhage is so profuse that the life of the patient is at stake. I have never seen a gastric hemorrhage result in death, and my plan has been to transfuse blood in the desperate cases. Ice bag to stomach, morphia. Glucose in solution in the rectum, the use of some form of internal hemostat, nothing by mouth and rectal feeding. It is well to remember that hemorrhage from the stomach frequently has an extra gastric cause, such as arterio-sclerosis and hypertension.

#### THE PART OF THE REFORMATORY INSTITUTION IN THE ELIMINATION OF PROSTITUTION.

Dr. Martha Falkner (Social Hygiene) asserts that prior to the war efforts at suppression of prostitution consisted in closing red light districts. After war was declared, the War Department was empowered to forbid houses of ill fame within certain limits of all cantonments, these limits to be prescribed by the authorities. The penalty for infringement of this regulation was a fine of one thousand dollars, or imprisonment for one year, or both. The first enforcement of the law demonstrated the need of facilities for the custody and rehabilitation of girls and women who were a menace to the men in training. Accordingly, President Wilson set aside two hundred and fifty thousand dollars for providing proper accommodations for the delinquents. It was deemed more expedient to remodel existing buildings than to build new ones. Old "sporting houses" were remodeled as houses of detention, and farm houses and schools became the nuclei of reformatories. Federal aid was asked for the expenses of remodeling and equipment, the community in which the reformatories were established were asked to pay for the upkeep. In this way ten detention houses, three detention hospitals, three city farms, and four reformatories were established. Besides these there were some communities which established houses of detention independently of Federal aid. In all of these institutions the girls and women who were arrested were given physical and medical examination, and sympathetic study pending their trial. This movement became very popular.

A study of these women showed them to consist of silly runaways, feeble-minded girls, girls who could respond to probation, and nervous, undernourished, over-sexed girls, and women who needed special training. All of the girls and women were taught to feel their responsibility to the community, and to recognize the dignity of labor.

Detention hospitals where nothing but medical treatment was attempted proved of no value as reformatory institutions, and the women who were cured of one infection returned time and again with fresh infection.

Experience showed that reformatories should be supported by State laws providing for long

terms of commitment, by probation or protective work to precede commitment, by parole or follow-up work or discharge, and by general interest of the citizens acting through a board of managers.

It will depend entirely upon public sentiment whether or not this work will be continued after the return to normal peace times.

#### VENEREAL DISEASE IN THE ARMY.

Lieut.-Col. I. W. Brewer (New York Medical Journal) states that as far as infection after entry into the army is concerned the venereal problem has been pretty well solved. The educational campaign carried on for many years and the use of the prophylactic have made new venereal infections very rare in the army.

A majority of the cases were chronic at the time they arrived in camp; 19.4 per cent. were infected after joining the army.

Of 273 cases tabulated, 41 per cent. had been infected for more than three years, during which time they have been a danger to the public.

The experience of the army with venereal diseases during the present war shows that there is a serious venereal problem before our people and that its solution will not be arrived at by any one method of attack, but by a combination of various agencies of which the most important are education, reporting of cases, free treatment of those infected, and the full hearty co-operation of the public. The time is past when the parent in his or her happy home can ignore this problem while the least favored parts of the community are exposed to the temptations of the prostitute.

#### DEFEAT OF THE OSTEOPATH BILL IN QUEBEC.

The Bulletin Medical de Quebec remarks, "As we might have foreseen, the osteopath bill has been again rejected by our legislators. It did not even succeed in getting into the legislative assembly, and the efforts for it had to be restricted to an attempt to influence the committee on private bills."

# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

A. L. Seeley, Chairman ..... Mayville  
 E. W. Toles ..... Lansing  
 R. S. Buckland ..... Baraga

Editor and Business Manager  
 FREDERICK C. WARNSHUIS, M.D., F.A.C.S.  
 On Leave of Absence on Duty  
 Medical Reserve Corps, U. S. A.  
 D. EMMETT WELSH, M.D.,  
 Secretary Editor, pro tem.

All communications relative to exchanges, books for review, manuscripts, news, advertising, and subscription are to be addressed to D. Emmett Welsh, M.D., 4th Floor Powers Theater Building, Grand Rapids, Mich.

The Society does not hold itself responsible for opinions expressed in original papers, discussions, communications, or advertisements.

Subscription Price—\$3.50 per year, in advance.

Entered at Grand Rapids, Michigan, Postoffice as second class matter.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 28, 1918.

June

### Editorial Comments

We have a few extra copies of the May issue of the Journal which are on sale at the office of the Secretary-Editor at twenty-five cents per copy.

The County Secretaries are again requested to send us their news items together with the original papers which are read at the meetings. Send us the minutes of your meetings so that your county society may be represented in the Journal.

Because of the many requests for the plates of the pictures which appeared in the Victory number of the Journal, the State Society has decided to sell the plates for a very small amount—much less than the original cost. The full page cuts may be obtained at three dollars each, and the small cuts—five in a group—at \$1.50 each.

### TONSILLECTOMY VERSUS HELIO-ELECTRIC METHODS.

Stewart (New York Medical Journal, Jan. 4, 1919) believes that inflamed and discharging tonsils should receive some preliminary treatment by the diathermic method before they are re-

moved. He further favors fulguration. He advises in some cases the Kromayer lamp, and quotes McCaskey to the effect that after reducing an enlarged tonsil by ultraviolet ray there may be a return of tonsillar trouble unless the patient's nitrogen metabolism has been placed under a proper equilibrium. At the Johns Hopkins Hospital both tonsils and adenoids are considered as physiologically important structures, which besides their unknown purposes protect the lungs from dust and disease germs.

Tonsillar and nasopharyngeal diseases have caused infections and rheumatoid arthritis, lumbago, acute rheumatic fever, enlargement of cervical glands, and kidney inflammation. The course of infection from the tonsils to other parts of the body is thus established beyond question, and the indications for the treatment of tonsils and adenoids is clear and rational, but tonsillectomy is not the only method of treatment. It is therefore of great importance to study the report of the 1000 operations of tonsillar and nasopharyngeal infections as a cause of systemic disease, as reported by the Johns Hopkins Hospital. These cases were seen and carefully studied during the last five years. There was no haphazard and hurried examination, the operations were performed under the strict rules of modern surgery, skilled anesthetists and trained assistants were a part of the rigorous operative routine, and the cases were followed up to secure the facts with respect to the diseases supposed to be due to the tonsillar and adenoid infection.

The result of the experience gained in the foregoing study given to these 1,000 cases of tonsillar and adenoid infections may be summed up as follows:

Tonsils and adenoids should not be operated upon during the acute stage of a tonsillar inflammation, as a brain abscess may result.

Diabetes is just as much a contraindication for tonsillectomy and adenectomy as it may be for any operation under general anesthesia.

Tonsillectomy is rarely of benefit and may do harm in the deforming type of arthritis.

Nothing is to be gained from a tonsillectomy during the acute stage of chorea, acute rheumatic fever, or endocarditis.

The Johns Hopkins surgeons state that, in their experience, the very diseases for which tonsil and adenoid operations are performed may and do recur after the nose and throat have been put into a normal condition.

In any event the tonsils are not the only gateway for disease germs to gain entrance into the system.

Tonsil operations are justified only as a means

of possibly preventing further heart infections as a result of later attacks of acute tonsillitis.

The frequency of heart and joint affections in chorea may justify the preventive measure obtained by tonsil treatment.

Tonsil treatment is indicated in the infections, joint affections, and in muscular pains of myalgia.

In the early stages of kidney inflammation, tonsil treatment is indicated.

The tonsils are the main cause of enlarged lymphatic glands near the angle of the jaw, as these large glands in the neck rarely subside after treatment of diseased teeth.

Tonsil treatment alone will not cure tuberculous glands, rheumatic joint disease, nor kidney inflammation.

Makuen in an address to the Clinical Congress of Surgeons says: "The capsule of the tonsil is even more essential to the normal structural relations of the pharynx than the tonsil itself, and its removal is to be deprecated from the standpoint of one who has any regard for the phonatory and articulatory function of the adjacent muscles." The complete removal of the capsule of the tonsil robs the interpharyngeal musculoaponeurotic sheath of its main support. This is the reason for a collapse of the pillars of the fauces. The removal of this supporting structure likewise increasing the wound area and causing an anatomical change in the faucial relations, is the deplorable result.

Of interest in this connection, the following data have been obtained by the author, in correspondence with 1,000 physicians in Ohio, Indiana and Kentucky:

Total number of tonsil operations, 10,756; deaths, 15; deaths in five out of seventy-one large cities written to, 18; primary hemorrhage, 432; secondary, 79; ligations for hemorrhage at time of operation, 488; hemophiliacs, 26; prolonged coagulation, 54; voices lost, 4; voice tones gained, 2; septic cases before operation, 252; septic cases after operation, 9; fatalities from ether, 2; fatalities from bromoform, 1; fatalities from oxygen and ether, 12; cases needing stimulants after operation, 55; diphtheria after operation, 8; bronchiectases after operation, 3; pulmonary abscess after operation, 1; hyperpyrexia after operation, 14; emphysema of face after operation, 1; skin rashes after operation, 8; dryness of throat, many replies stated frequent, 39; adhesions of pillars, many replies stated frequent, 21; ear infection, many replies stated frequent, 35; shock, many replies stated frequent, 19.

These statistics are brought to notice to direct attention to the facts:

That tonsillectomy does not insure against

future attacks of sore throat, nor of other diseases and infections for which the operation is done.

That tonsillar tissue is present in nearly one-half the cases after operation, and not always to the detriment of the patient nor a reflection on the operator.

That helioelectric, fulguration, and diathermic methods do not accomplish more than the cutting operations, their value being in the equally good results to be obtained in selected cases in comparison with the cutting methods; less the risk to the voice and of death from anesthesia, or uncontrolled hemorrhage; and without the shock to the patient from undue hemorrhage when the latter is controlled.

That badly diseased tonsils should be enucleated whether large or small unless some unusual factor contraindicates the use of general or local anesthesia, in which case secure the best results possible by helioelectric methods.—The Therapeutic Gazette, April 15, 1919.

#### STATUS LYMPHATICUS.

Status lymphaticus is a condition usually seen in rachitic children where there is an enlargement of the cervical axillary and bronchial groups, of the glands at the angle of the jaw, adenoids, enlargement of the tonsils both faucial and lingual, Peyer's patches, and especially of the thymus. This condition is interesting from its frequent causation of sudden death during anesthesia for some simple operation. Escherich believes that the pathological condition of the thymus causes a form of acute intoxication, with cardiac syncope and paralysis. The thymus enlargement in such cases of sudden death is usually enormous. Reich gives the absolute normal dullness of the thymus as irregularly triangular with its base formed by the line connecting the sterno-clavicular articulations, and its blunt apex at the level of the second rib, while its lateral boundaries correspond approximately to the size of the sternum.

A little more than half of the gland falls to the left side. Thymic dullness greater by a centimeter than these is pathological and even the normal dullness disappears at the fifth year. Symptoms of enlargement are principally stridor in breathing, which is increased on flexing the head, thus interfering greatly with the child's nursing especially from the breast.

There is increased dullness which is best made out by percussing with the child's head low and extended, and X-ray examination reveals an increased area of shadow.

These children require great care, as sudden

death is common and one must be particularly careful in giving them an anesthetic. Marked cases of thymus enlargement show a weight of the gland even up to thirty or forty grammes, although the normal weight is six to seven grammes at birth, and three to four grammes from birth to the fifth year, when it atrophies.—Long Island Medical Journal.

### THE PRACTICAL APPLICATION OF ETHICAL ECONOMICS.

To the Editor of The Medical Times:

Prior to this war various evolutionary forces, without intelligent aid or organized assistance on the part of the medical profession, gradually compelled and are still compelling the followers of medicine into:

1. Accepting the specialist.
2. Demanding hospital facilities.
3. Associating and segregating into more or less organized groups.
4. Establishing private clinics, as the Mayo Clinic and similar institutions.
5. Establishing, as just instituted by Columbia University of New York, a still more advanced form of scientific medical organization, a clinical laboratory.

The same evolutionary forces have caused the laity:

1. To form mutual benefit organizations for the sick.
2. To demand contract practice.
3. To form hospital associations.
4. To demand state aid.
5. To demand free clinics.

In every one of these vitally important politico-economic movements, and in view of the fact that millions of men will return after the war and demand for themselves and for their families the same scientific treatment they have experienced under military organization, medicine as a profession has failed to recognize the same exciting cause in each instance—an economic demand that the theoretical standard of efficiency "Medical Ethics" must be replaced by a more practical standard, "Ethical Economics." This standard demands the application of scientific methods through economic organization to every-day life, so that efficient medical and surgical treatment will come within the reach not of the few who can receive hospital treatment in standard institutions but of every human being.

Confronted by the above politico-economic facts, a very pertinent question presents itself to the medical profession at large: What is medical organization—medical education—doing to solve

these problems, at a time when an imminent reconstruction period confronts every form of organized society including the profession of medicine?

Based on observation and experience of 20 years the writer claims that virtually nothing practical has been systematically undertaken.

Nowhere is there evidence that medical organization—medical education—has ever recognized three basic psychologic factors that govern all intelligent human acts:

1. One hundred per cent. of the representatives of medicine, physicians, are human beings, and the minds of the highest and lowest are compounded of the same elements, held subject to the same laws of action; and the knowledge that any one of them possesses comes—as it does to every other human being—through the ordinary channel of the senses.

2. In the search for knowledge in every branch of human society, including medicine, science has produced innumerable mechanical aids to increase the efficiency of the senses of man. Therefore, logically, all things being equal, the mind of man gathers knowledge in proportion (a) to the number of mechanical aids employed to increase the efficiency of the senses; (b) the accuracy with which these aids are employed.

3. As a rule normal human emotions govern every human being, including the physician. Therefore, if the recompense for labor does not enable the physician to carry overhead expenses; does not give him time and funds for improvement, study, travel and necessary recreation; does not produce profit that is protection for his family and for himself in sickness and old age; he can neither give efficient scientific service nor continue to progress. If adequately recompensed he can give scientific service far more readily and is more likely to progress.

Yet in the face of these obvious evolutionary politico-economic movements and the basic psychological facts that govern intelligent human action, medical education is still demanding for every individual admitted to the study of any branch of the science and art of medicine a high standard of preparatory education, in substance a B. A. degree from a recognized educational institution.

This standard, combined with the principles of education that are employed in every medical college after admission to study is such that it can be justly claimed that the educational methods pursued tend to make the graduate physician in this work-a-day world pursue the practice of medicine as a pure science, that can isolate itself, that needs no association with the

applied sciences, especially economics. For instance, medical education during all these years has apparently never conceived of the practical necessity of recognizing the psychological fact No. 1 as a pre-educational factor of utmost importance.

The United States Government, on the other hand, by the present war has been unceremoniously forced into recognizing its educational value—as evidenced by the first standard of admission to the aviation service, where the highest possible human skill is required in order to successfully destroy life. In this initial examination the most accurate possible physical and mental tests are employed in order to ascertain not only the inherent character and personality of the candidate, but more especially the acuteness, stability and durability of every one of his senses.

In the profession of medicine, however, where there is a demand, if it were possible, for even greater character and personality, acuteness, stability and durability of the senses—the object of the physician being to preserve life—no recognition is given to the fact that efficiency in applying abstract knowledge depends upon the efficiency, not of one but all of the special senses.

The student of medicine may be deficient in one or more of his special senses, have little tactile sensibility, a poor sense of smell or hearing, defective eyesight, little character and no personality adaptable to a physician. Yet no tests are made to ascertain or correct these defects, and the student is graduated and permitted without any organized supervision to try to preserve—where he would not on the same grounds be permitted to destroy—life.

As to the educational value of the psychological fact No. 2, there can be no question that the mechanical aids of scientific medicine (which include all laboratory methods, even history filing and compilation may be added) have become so numerous, have so developed in detail that to attain efficiency requires not general but definite technical knowledge.

There can be no question that medicine will become organized in the future, and when so organized it can be no exception to the general rule and must attain efficiency by having subdivision of labor—therefore organization of labor and equipment.

Medical education as conducted to-day may be ethical but it is still decidedly theoretical. Medical schools virtually only graduate officers and then only colonels. No provision is made for officers of lesser rank, for the privates in the form of technicians. For privates, we as a profession, must take the unsuccessful physician, volunteer

nurse, half-trained office girls, or any kind of unskilled help available, when each physician must train for himself after his own sweet will in order to fill the ranks of scientific medicine with privates. Yet economic organization is staring the profession in the face. With this army thus organized we guarantee to defend the public from disease—then wonder why our efforts as a profession are not appreciated!

Even the colonel, who may later wish and be willing to work for a higher rank—for instance to become a specialist—there is no institution provided where through concentration of skilled leaders, equipment, technical assistance and economic organization he can learn his specialty from A to Z, and be instructed and equipped with a modified plan of economic organization, whereby he can do justice to the public and his profession by maintaining and delivering the high standard of goods which he advertises to sell in competition with the inferior grades of the cults by attaching to his name an "M. D."

As a profession, in most of our medical colleges, we unquestionably try to manufacture a high standard of goods, which goods must be sold in the open market to the public. We advertise to the public that the sign "M. D." signifies the highest standard. Yet as a profession have we adopted any organized means whereby we can demonstrate to the buyers, the laity, the value of standard "A" as compared with the imitation "B," and in so doing increase the demand for standard "A" goods, to the benefit of both producer and consumer? I think not.

The public through universal education is being taught to think, to reason, yet the medical profession to-day, like the cults, is asking the public to accept goods on faith without investigation; and we claim as a standard science based on reason, not wholly on faith.

If the profession of medicine will not undertake to solve these politico-economic problems for itself, it is true that evolutionary forces will solve them for us, but with brute force and a corresponding indiscriminate destruction—unless man employs the intelligence that nature has given him to anticipate evolutionary movements, through the use of intelligence scientifically applied but governed by the higher human emotions.

It is not within the limits of this letter even to outline the means to the end that experience suggests. But the old adage always proves true that where there's a will there's a way.

The object of this letter is to arouse, with your assistance, sufficient sentiment to instigate a systematic, organized movement to attain the end

sought—the practical application of ethical economics; so that humanity may be efficiently served by the profession of medicine, and the profession win universal respect and attain efficiency through following out not only ethically but economically the dictates of the noblest of all the sciences.

G. S. Peterkin, M.D., Seattle, Wash.

—Medical Times, March, 1919.

#### WAR-RISK INSURANCE.

The secretary of the Treasury, Mr. Carter Glass, recently published a statement on the subject of War-Risk Insurance and the so-called Compensation, and this well may be reproduced in this place, inasmuch as physicians, especially in country districts, may be asked for their opinion on these matters. Consequently, we print the Secretary's statement in full:

"Considerable confusion and much misunderstanding seems to prevail among the relatives and beneficiaries of men in the military and naval service as to their rights under the War-Risk Insurance Act. Many mothers and fathers named as beneficiaries of the Government Insurance applied for by their sons have gained the impression that they must prove dependency, in order to receive payment of insurance. This is an entirely erroneous impression, probably owing to a confusion of the insurance and compensation provisions of the Act of Congress of October 6, 1917, and to a mistaken assumption that the terms 'Insurance' and 'Compensation' are used interchangeably, whereas, they represent two entirely separate and distinct benefits.

"Insurance is payable regardless of any dependency and the beneficiary designated in an application for Government insurance, if within the permitted class of spouse, child, grandchild, parent, brother or sister, is entitled to receive the insurance in monthly instalments, without proving any dependency upon the insured.

"'Compensation,' however, which is separate and apart from insurance and takes the place of the pensions provided under the old pension-system, is payable only to a wife, child, dependent mother or dependent father of a man that is disabled or dies as a result of injury suffered or disease contracted in the line of duty while employed in the active service. Compensation may be payable in addition to insurance, but, a mother or father must prove actual dependency, in order to receive monthly payments of compensation, although they will receive the insurance in monthly instalments if named as the beneficiary thereof, whether they are dependent or not.

"No dependency need be shown by any beneficiary in order to receive the Government insur-

ance; but, a mother or father must prove actual dependency upon their deceased son for the necessities of life in order to receive the additional payment of compensation."—American Journal of Clinical Medicine.

#### CANDY AND CALORIES.

With the after-war return of the nation to its normal mode of living, there are evidences on all sides of a relaxation of the strenuousness of the program of conservation. Wheat, meat and sugar are no longer restricted in their distribution in the ways that the voluntary rationing schemes of last year demanded. It is reported that the candy manufacturers who have been so severely hampered by the necessity of producing sugarless sweets, are preparing for an increase in their business in the near future. We are told that the people of this country are learning that "candy is as healthful as it is delicious," and that "candy has more calories per pound than any of what are regarded as the ordinary dishes served at meals in the American household." Even the low score of caramels with only 1,400 calories per pound exceeds all but corn and rice among the more familiar dietary components; while milk is left quite in the background with a mere 800 calories per quart. We have no quarrel with candy lovers or with manufacturers of delicious sweets. Sugar and nuts and fats which enter into common confections are usually as digestible as they are toothsome. Having succeeded in educating the American public in some degree to the real meaning of calories as measures of food fuel, our experts in nutrition are face to face with a new problem in popular education. The public must now be taught that food values are not expressed in calories alone any more than miles-per-gallon of gasoline are the sole criterion of automobile excellence. A properly selected diet represents the inclusion of many items, some of which are not to be evaluated primarily in terms of calories. Every one ought to appreciate, after the nation-wide propaganda for more milk, that the latter food represents nutrient virtues that put it into the cheap-at-any-price class. The green vegetables contribute factors to our diet that candy can scarcely imitate. Even raw meat proved to be a blessing to Stefansson with which the choicest "package goods" could not compete when his party was threatened with scurvy during their sojourn in the Arctic regions. It has been asserted that sugar and sweets, though valuable fuel foods, are dangerous for children unless the use of these articles is carefully controlled. Writing in the manual of the United States Food Administration, Dr. Ruth Wheeler states of

sweets: Because of their flavor, it is only too easy to eat too much of them. They are likely to cause digestive disturbances, to take away the appetite for other more valuable foods if eaten at the wrong time, and therefore indirectly to cause anemia and bad teeth. Obviously, they are entirely unbalanced foods, supply only fuel and no building materials in any permanent sense of the world. They must, therefore, supplement and not replace other food. In moderation, as dessert after a good meal, they are in their proper place." This expresses the crux of the matter: Everything in its place—including candy. To propose that even the most delicious confection shall replace bread and butter, fruits and vegetables, meat and milk, is preposterous. Let candy rest on its long won laurels.—Journal, A. M. A., May 3, 1919.

### "BIG STUFF."

I often wonder if the rest of the world is like the Dental profession. It seems that we have more braggers and liars than any other profession I know of. However, my experience in the world has been limited and I know best of all the dental profession. Just the same it is disgusting to listen to some of this "Big Stuff" that is peddled out by some of our brethren. Many of them are good fellows outside of their ability to stretch the truth. I often wonder why more of these fellows don't succeed better in life than they often do. According to their own statements they are "some" dentists and also that, they never "fall down" on any proposition. They are always successful and full of criticism for the lesser lights in the profession.

I have in mind at this moment a young dentist who is now in France. He was a good fellow in France. He was a good fellow in many ways but his middle name was "Big Stuff." He always was 100 per cent. perfect and he admitted it. I talked to his successor the other day and I asked him "How is Business?" His reply was this: "Business has been fair. It would have been easier for me to get started in ——— if my predecessor had not been such a poor operator." Well you see things from both angles and then you realize that there is often two sides to a story.

I remember at another time listening to the spouting of a real doctor. He is a regular surgeon and limits his practice to same. He lectured to a society of dentists where I was present. Many X-ray plates were shown of various conditions which were results of decayed teeth, (so the doctor stated). It's wonderful now-a-days how much the M. D. can lay at the door of the

dentists and also more wonderful how well he can criticize the dentist's work. I really think it is the wonder of the 20th century how wise some of these fellows have become since they began reading a little dental literature. ,

Another M. D. was called to see a child who was ill. The doctor removed the glands from her neck and when she was well enough to get out of the hospital he told the father to take the child to a certain dentist and have a certain tooth removed as it was rotten, suppurative and was causing all her trouble. Well the child came to me instead and after carefully examining the mouth I asked the father to point out the offender as I could see nothing wrong. He pointed to a certain tooth and stated that was the one to be removed. I questioned the patient and she gave no history of pain of any kind so I tested the tooth and found it vital. The only thing wrong with this tooth was the fact that some dentist had been guilty of placing a fine restoration in this tooth with copper amalgam and of course a trifle discolored. Again I say "Big Stuff."

Dentists as a rule are the best fellows on earth, but they are too often inclined to brag about their ability to perform dental work or how much money they are pulling down. Some seem to set their mouths going and then go away and let them run, never realizing that the poor misguided public takes this all in and may believe it. It's mighty easy to say "My income tax was over \$600 this year." That don't cost anything to simply say it. The public think of all those things when the Sears Roebuck catalogues come along and the Advertiser from the large towns announcing "Two Dollars Worth of Dental Work for a Dollar." Many think that talk is cheap, but we also know that it often is the "still sow that gets the swill."

It is amusing to get with a bunch of "Spanish Athletes" and listen to the champions throw the "Bull." You must admit that some of the boys are good with this "Stuff."

On the other hand we have the fellow who has been a tight-wad all his life; inherited a bunch of money possibly and also invested in land maybe, and the stuff went up and he became rich in spite of himself. It sure makes you tired to hear a fellow of this type always saying, "I cannot afford it," and often saying it so it becomes a part of his usurious soul. We have this class of birds as well as the fellow who is telling you about his worldly goods, but is a "C. O. D." with the supply houses.

Another good stunt is some of this so-called specializing. About all a fellow has to do to become one, is to announce it to the public and go

to work. The bigger the commissions, the bigger the specialist. However, real specialists are O. K. and should be encouraged. Many men could and do become good special men without a training abroad or elsewhere. It's always up to the man himself.

It also makes a fellow a trifle tired to listen to some fellow who fits glasses and carves adenoids and tonsils for a living setting himself so far above his fellow man; who scoffs at the dentist and calls him a mere mechanic. We have plenty of this variety, too, and often their knowledge of dental subject is a trifle crude. These fellows frequently spot the glint of a gold crown and they have been known to remark, "Get that tooth out, you ought to now better than let some foolish dentist put such a thing in your mouth." There is no use trying to tell these fellows that the root is the part that becomes infected and not the crown. They would pass this same case as A number one if the crown was missing; and as to a porcelain tooth, they never recognize it at all. It's the shining gold they are after in more ways than one. I have decided the only way to handle this class of doctors is to "treat 'em rough" and tell the prospective patients to see Gifford for their eyes.

After all, none of us are perfect and there is some good in most of us. We all have to try and learn each day. Be charitable to each other and if we will treat the other doctor as we would like to be treated, we all will succeed. We should remember that this "Big Stuff," being peddled in a million different forms will bring us all grief sooner or later. There is still much for even the wisest man to learn.—Dental Facts by Bradley F. Lockwood, D. D. S., Yankton, S. D.

#### RESPONSIBILITY OF THE TEACHER OF HOME ECONOMICS FOR HEALTH HABITS OF HER PUPILS.

One of the many responsibilities of any teacher is interest in the health of those in her charge and in providing healthful conditions for their school activities. But this responsibility is emphasized in the case of the home economics teacher, since nutrition, shelter, and right living, the three most vital factors in the maintenance of health, are her particular province.

The well-planned course in foods, including the study of their preparation and use, should fit the girl or woman to select those foods which are most healthful for herself and her family. The study of clothing includes selection as well as construction, and hygiene is one of the factors governing selection. The maintenance of the

health of the family is one of the big problems of the home maker. The training of either girls or women in any of these lines should be of such a character that immediate application is made of the principles involved. The teaching of foods or clothing to a class of girls has failed if what she has learned is not applied in her daily life. For instance, having studied the selection of food for body needs, does she order a good nutritious meal at the school lunch counter or bring such a meal in her lunch basket? Understanding the hygienic properties of various fibers and materials, does she clothe herself properly? Does the woman who is taking a course in home management arrange for healthful living conditions for herself and her family? These practices taught by the home economics teacher and added to and strengthened by the teachers of related subjects, such as physical training, general science, and physiology and hygiene, should become the health habits of the girls and women.

The ways in which these habits can be developed by the home-economics teacher are manifold. Example is stronger than precept, and the teacher must practice what she preaches. She is usually a very busy person but she is expected, and should be expected, to look healthy, well-dressed, capable and happy. She should never be seen eating a badly chosen meal, wearing an unbecoming or unsuitable gown, or performing her duties in an unsystematic or inefficient manner.

A second means to the end is the subject matter of the courses. Do the courses in food, clothing, and home management provide material and time for work on their health phases? Is the laboratory practice for these phases well developed? Does it receive attention even in the elementary courses?

The length of time for a task should be regulated to the physical ability of the child and this implies knowledge of the physical nature of the child on the part of the teacher.

The method of presentation of the subject matter should be adapted to this end. The work should be made alive and practical, the students should be inspired to apply principles and should develop an attentive and critical attitude toward conditions which affect their health.

The equipment of a laboratory is not always within the control of a teacher, but she should attempt to have her laboratory approach ideal conditions. The ideal laboratory is so equipped that the maximum amount of work can be done with the minimum expenditure of energy. The laboratory, like the teacher, sets a standard for the student. Working areas should be of such size,

shape, and height that correct postures can be maintained without effort. The teacher should insist upon correct sitting, standing, and working positions. Light and ventilation should be noted and carefully regulated. The members of the class should be taught to note and correct these conditions for themselves.

This question of health habits is a part of that fundamental interest of home economics—right living. As such, the home-economics teacher should see her opportunity for developing health habits and make the most of it.

Zella E. Bigelow.

#### FELLOWSHIP WITH GERMAN DOCTORS.

In a recent number of the Medical Record Dr. W. W. Keen contributes the following letter:

I have thoroughly approved of your recent editorials as to German doctors, who, when peace is declared, it is reported, are actually, proposing to come to America and enter into practice!

At the close of the "Appeal to the Civilized World" of the ninety-three German Intellectuals among whom appear the names of von Behring, Ehrlich, Haeckel, Neisser, Roentgen, Rubner, Waldeyer and Wassermann, all doctors, they say:

"Have faith in us! Believe that we shall carry on this war to the end as a civilized nation to whom the legacy of a Goethe, a Beethoven, and a Kant is just as sacred as are our own hearts and homes. For this we pledge you our names and our honor."

One of their thus accredited statements is that "the German army and the German people are one." Let us see what that army did.

The armistice requires the German army to point out the wells that they have poisoned! So far as I know, this is the only occasion in history in which an act of barbarism has been officially confessed!

Their atrocities in Belgium, France, Poland, and Serbia are known to thousands of witnesses. Those barbarities were the work of the army, with which, we are assured, the German people "are one."

They initiated the horrible poison-gas warfare.

They permitted the "unspeakable" Turk, their welcome Mohammedan ally, to murder by wholesale the defenseless Christian Armenians, including thousands of women and children.

Yet poisoning wells, using poisonous gases, and murdering innocent civilians—men, women and children—are all prohibited by solemn treaties signed by Germany. But treaties are only "scraps of paper" to Germany.

And after all these atrocities and these con-

stant violations of international law do these German doctors dare to come here and propose to obtain a living here as medical practitioners?

Never was there a more insolent proposal. The Germans are whipped, but still defiant; beaten, but still unregenerate. Witness what Hindenburg said to his army two days after the armistice: "We leave the fight, in which for more than four years we have resisted a world of enemies, proudly and with heads erect." They must be taught many stern lessons in humility instead of the haughty arrogance which has been their national trait for years. If they dare to come, I hope that no American doctor will ever take any such man by the hand, and that no American medical society will admit a single one to membership. They may be sure that few, if any, American patients will ever patronize them. Let them stay at home.

In time, when as a nation they have repented of their sins and brought forth fruits meet for repentance, and especially when a younger and better and cleaner generation has come on the stage, then, and not until then, may they be received into civilized society.

#### CHIROPRACTIC BILL TWICE DEFEATED.

A bill providing for a separate board for the licensing of chiropractors was defeated in the California legislature on March 26, by vote of 39 to 38. It was reconsidered on April 2, and again defeated, this time by a vote of 42 to 32.

### *Correspondence*

#### LETTER FROM COBLENZ.

March 17, 1918.

Yesterday evening, I spent in Coblenz. This was 2 days after the great review of the First Division by Gen. Pershing. One of the aids whom I met in the Officer's Club told me the general was tickled foolish over the review; that he kept rehearsing it and smiling over it all through dinner that night. And I must admit that it was an interesting show although insufferably tedious. Imagine a great natural stadium formed by the hills—a mile long by more than half a mile wide, covered with a short greensward. Beginning at 11 o'clock in the morning, the various organizations, coming from every direction, began pouring over the edges into this bowl. There were the infantry regiments, the artillery with their long dark lines of carriages, the lively, light, mule-pulled machine guns, the engineers, the signal corps, the various staffs mounted on spirited

horses, hoards of glittering brass bands and a gallery of townspeople and camp-followers. The division drew itself up in ranks on the south side of this huge stadium, each organization taking its allotted section on the slope, with all the bands, now merged, in the center. The audience took its place on the opposite side. It saw 25,000 soldiers in that bowl all at once, and under arms which, of course, makes the effect slightly different from that of the crowd at a Harvard-Yale game. I could not but think of the power that lay in that complete though small army of thoroughly seasoned and trained men. With it, Washington could have won the Revolutionary War in about one hour. By reason of the artillery and the machine guns, it would have turned the tide for either side in the War of the Rebellion in less than a week. Napoleon never would have lost Waterloo with that army to boot. There we stood until half past two, waiting for the General, much of the time at attention. Only the band, now 150 strong, broke the monotony; nothing took the edge from the chill. At last having finished his dinner in some comfortably warm room in Montebaur, the general burst like a sunbeam over the hill opposite, mounted upon a matchless horse which he handled beautifully, and surrounded by those lesser well-dressed luminaries, his staff. I want you to understand that the general is a magnificent creature to regard. On foot, he passed through every file in the entire division, speaking personally to many of the officers. The waiting was interminable. About 5 o'clock he called all the officers and non-commissioned officers to the reviewing stand and made a speech which might better have been omitted. Then those to be decorated—about 60—marched across the field, all abreast, to the strains and grunts of the band; and the general, preceded by a crier and followed by a pin-fastener and by Generals Dickman and Hines, stuck the appropriate medals upon the breasts of the candidates beginning with the general at the head of the line and finishing with a little doughboy at the end. As he passed along, he spoke to each man and shook him by the hand. Thus I got my long-deferred D. S. C. That ceremony being over, we all stood by the general and watched the review as the division moved out of the amphitheatre. Although most of the organizations had risen early in the morning, marched from 5 to 10 miles and had stood about 6 hours in the cold with no other food than a hunk of bread, they now passed by with the step of a panther. They were under full pack. The lines were irregular, there was no marked time, there was no goose-step. But that great thick graceful column, moving so easily, so silently on

the soft turf, producing in the beholder such a sense of reserve force, is a sight which will always remain in my memory. It looked as though it could have marched all night. Individually they loped along easily. "A great division" was the truest thing that General Pershing said.

The next was the night of Col. Billy Dodd's party. Not caring much about dancing, it fell to my lot to entertain an old brigadier general similarly disinclined. We poured many libations so that "sick call" was an arduous ordeal for me at 7 the next morning. However, I have recovered at the present writing.

W. W. Manton, M. R. C.,  
Captain 6th F. A., First Division.

New York City, May 7, 1919.

Journal of Mich. State Medical Society,  
Grand Rapids, Mich.

Gentlemen:

I am enclosing an article taken from the report of a conference of shoe manufacturers recently called at our headquarters. The idea of such a conference grew out of the results of the physical examinations made by the Division of Health of our Bureau of Social Education, in its endeavor to promote health among women. Within the last 4 months such examinations have been given to various groups of girls in different occupations, and there has come forcibly to our notice the fact that an overwhelming number of women are wearing shoes, which, with narrow pointed toes, inflexible shank, in most cases high heels, pinch the foot, cause bad posture, and so incapacitate the wearer for freedom at work and necessary normal exercise, all of which affects the general physical condition.

The shoe manufacturers who conferred with us on this question, showed great interest, and with their help we hope to encourage the wearing of good shoes, and make the purchase of them possible in all cities and towns in the United States. May we not have your co-operation in putting this matter of wearing good shoes forcibly before the readers of your paper? It will mean to the general well being of the American women to have the students and graduates in Physical Education, Medicine, and Nursing take a definite stand in this foundation for good posture, health and efficiency.

Yours very truly,

HARRIET WILDE, Director Physical Education.

A Normal Shoe For a Normal Foot.

Can the shoemaker build a shoe that will keep normal a normal foot? And having built it will the public be brought to see the beauty of the

product? Not so many years ago we gave our admiration to the small, tightly laced waist. To-day we laugh at it and to-morrow we shall be equally amused by the pencil-point toes and high heels that tilt the human foot to the angle of a horse's hoof. The war made low heels beautiful on Fifth avenue, and consequently on Main street; if it had lasted a little longer, women would, of necessity, have gone the whole way with the shoe problem. The shoes of the future will not be "prescription" shoes, they will not cater to deformities, but they will be built to conform to the normal lines of the foot.

The National Board of the Young Women's Christian Associations through the Health Division of the Bureau of Social Education, has started a drive to get this shoe for American women and to popularize it. The Associations have all the health arguments. They have a national membership of four hundred thousand women to listen to them, but they cannot get this shoe without the co-operation of the manufacturers and dealers who make the shoes and determine the styles. To bring about this co-operation, a conference with leading shoe men was held recently at the National Board Y. W. C. A. headquarters in New York.

The manufacturers have a difficult problem, but not an impossible one. They must produce a low shoe, with a low heel and a flexible shank that will allow enough exercise of the muscles of the arch to keep them strong, a shoe with enough room for the toes and a straight inner border because the foot is naturally straight on the inner side. They must make the shoe attractive to the discriminating taste by using their knowledge of leathers to procure variety and fineness of finish for both day and evening wear. Will the shoemaker do it? When he does, the National Board of the Young Women's Christian Asso. will be back of him. Every woman who wants to wear the "normal line" shoe must be able to get it. All samples of shoes will be examined, an alphabetical list made, according to States and cities, of all the firms that carry these shoes.

This list will then be sent to local Associations all over the United States, so that no one can say, "We would like to get these shoes, but we do not know where to find them."

Pueblo, Colorado, April 24, 1919.

Dr. F. C. Warnshuis,  
Michigan State Medical Society,  
Grand Rapids, Michigan.

My Dear Doctor:

I have taken the liberty of asking the management of the American Medical Association to send to

your address blank applications for membership in the Medical Veterans World War, for the convenience of physicians in your Society who desire to join this organization.

The former Medical Aide to the governor in your State has been requested to further this work and will appreciate the assistance you can render him at your annual meeting.

Assuring you that your co-operation will be appreciated, I remain,

Fraternally yours,  
HUBERT WORK, Temporary President.

Chicago, Illinois, May 13, 1919.

Dr. F. C. Warnshuis, Secretary,  
Michigan State Medical Society,  
Grand Rapids, Michigan.

Dear Doctor:

In compliance with a request received from the temporary president of the Medical Veterans of the World's War, we are sending you, under separate cover, a supply of forms for making application for membership in that organization, and also three copies of the Constitution and By-laws. Similar forms have already been placed in the hands of the physician who served as Medical Aide to the Governor of your State.

We are advised that Dr. Work, the temporary president of this organization, has already written to you relative to this matter.

Yours very truly,  
ALEXANDER R. CRAIG,  
Secretary American Medical Association.

Application for Membership in the Medical  
Veterans of the World War.

.....  
City County State  
.....  
Number Street  
.....

Date

I hereby apply for membership (or associate membership) in the Medical Veterans of the World War. I served during the period of the war as indicated below, as

1. An officer in the Medical Corps of the United States Army.
2. A Medical Officer in the U. S. Navy.
3. A Medical Officer in the U. S. Public Health Service.
4. A Contract Surgeon, United States Army.
5. An Acting Assistant Surgeon, U. S. Public Health Service.
6. A Medical Member Local Board No. ....  
at .....

7. A Medical Examiner Local Board No. ....  
at .....

8. A Member of the Medical Advisory Board  
at .....

I was appointed to the position checked above  
by .....

I served from .....  
to .....

I served in ..... during  
(The U. S. or in a foreign country; state where)

the period from .....  
to .....

as .....

(Brief history of service, giving units, dates  
and positions held; use reverse of this sheet  
and attach additional paper if necessary.)

..... M.D.  
(Full name of applicant.)

Application for membership, with fee of \$1.00,  
should be mailed to the Secretary, Col. F. F. Rus-  
sell, M.C., U. S. Army, Army Medical School,  
Washington, D. C.

Copies of the above application blank for mem-  
bership in the Medical Veterans of the Worlds  
War have been received at this office from the  
American Medical Association and will be furnished  
anyone on application.

It is incumbent upon all who can avail them-  
selves of this opportunity to become members.

### Deaths

The death of Doctor E. J. O'Brien of Che-  
boygan has been reported. His death occurred  
in Detroit.

The deaths of the following doctors not mem-  
bers of the State Society have been reported:  
Doctor Harry G. Lundgren of Ironwood, and  
Doctor Elizabeth Pope Wescott of Lansing.

### State News Notes

#### COLLECTIONS.

Physicians' Bills and Hospital Accounts collected  
anywhere in Michigan. H. C. VanAken, Lawyer,  
309 Post Building, Battle Creek, Michigan. Refer-  
ence any Bank in Battle Creek.

#### PRACTICE.

Central Michigan town of 700. A No. 1 school,  
Baptist and Methodist churches. Very fine farm-  
ing section. State roads. Average better than

eleven months yearly with machine. Good fees.  
Collected \$7,800 last year. Books open for inspec-  
tion. All you can do from start.

Fine modern ten room home, furnace heat, elec-  
tric lights, hot and cold water. Garage. Good  
three room office. For quick sale \$3,500. Terms  
one-half down balance to suit. Investigate. Rea-  
son: Special work. Address c-o State Medical  
Journal.

THE STUDENTS' LIBRARY ASSOCIATION  
of the Middlesex College of Medicine and Surgery  
solicits donations of Medical and Scientific libra-  
ries, Medical books, bound and unbound volumes  
of back numbers of Medical and Scientific Maga-  
zines, and funds for current American and foreign  
Medical Journals, Jennie Hrabka, Class '21, Asso-  
ciation Secretary University of Massachusetts  
School for Medicine, East Cambridge, Mass.

#### CANDIDATES LICENSED BY EXAMINA- TION, FEBRUARY 20, 1919.

Russell Wilbur Alles, Detroit .....	86.3
Joseph Bleier, Detroit .....	76.3
Ernest Anderson Cook, Fenton .....	80.1
Joseph Meryl Croman, Mt. Clemens .....	81.
Thomas Stephen Davies, Detroit .....	81.4
Chester A. Doty, Detroit .....	82.
George Henry Doyle, Marlette .....	81.7
Andrew Clifford Edgerton, Cass City .....	82.9
Charles Irvin Herrington, Bad Axe .....	84.6
Byron L. Howard, Detroit .....	86.
Donald MacLean Howell, Detroit .....	83.7
Charles Raymond Illick, Detroit .....	84.6
Joseph Arthur Kasper, Detroit .....	83.9
Norman Oscar LaMarche, Richmond .....	87.2
Warner Durelle Lane, Bad Axe .....	84.9
William Frederick Nill, Detroit .....	86.9
Frederick Schaffler Osterheld, Detroit .....	85.6
Hyman Lazarus Perlis, Detroit .....	82.3
Carl St. Claire Ratigan, Detroit .....	84.
Edward F. Runge, Detroit .....	85.1
John Albert Sheldon, Detroit .....	83.1
Manuel Soto, Detroit .....	84.4
Clayton T. Stubbs, Detroit .....	84.9
Roger Venning Walker, Detroit .....	84.6
Wesley Wellington Willson, Detroit .....	82.

The Franklin Moore bill creating a state  
health commission instead of a state board of  
health was signed by Governor Albert E. Sleeper,  
who appointed Dr Richard M. Olin, Secretary  
of the board, as state commissioner of health. Gov-  
ernor Sleeper also announced the appointment of  
four of the five members of the newly authorized  
state council of health. He has named Doctor Guy

L. Kiefer, Detroit, and Doctor J. W. Turner, Houghton for the six year term, and Doctor C. C. Slemons, Grand Rapids, and Doctor Frank M. Gowdy, St. Joseph, for the four year term.

The Clinical Club of Kalamazoo gave a dinner at the Hotel Rickman complimentary to Captain Ward Collins and Captain R. U. Adams, who recently returned from medical service in France with the American Army. After the dinner both men gave an account of their experiences in war work. The members of the dinner party, besides the honor guests were Dr. Sherman Gregg, Dr. William Huyser, Dr. D. J. Scholten, Dr. Frederick Shillito, Dr. Leslie DeWitt, Dr. J. T. Upjohn, Dr. Leonard Steward, Dr. Ralph Cook, Dr. William Perkins, Dr. Arthur West, Dr. Benjamin Shepard, Dr. C. B. Fulkerson and Dr. J. W. Bosman.

Doctor William A. Hyland, discharged as a First Lieutenant, medical corps, at Camp Custer, returned to Grand Rapids to learn that he had been promoted to Captaincy. Captain Hyland was attached to Surgical Team No. 107 and saw service with various mobile hospital and surgical stations on the various fronts in France and Belgium.

The physicians of the Wayne County Medical Society returning from war service may borrow from that organization money up to \$300.00 to re-establish themselves in practice. The funds will be loaned on notes, with interest at four per cent. per annum, the notes to run one year and be renewable when circumstances warrant.

Miss Anna Ruth Winter of the senior class of Hope College has been awarded a scholarship by the Woman's Medical College of Pennsylvania, the only school of its kind in the country. Miss Winter is the first girl student to receive a scholarship while at Hope College.

Dr. Rock Sleyster has been appointed successor to Dr. Richard Dewey, physician in charge of the Milwaukee Sanitarium, Wauwatosa, Wisconsin. Dr. Dewey will act as Medical Director of the Sanitarium.

The Milwaukee Sanitarium also makes the further announcement that Dr. W. T. Kradwell, Captain M. R. C., and assistant superintendent of the Sanitarium will soon be home from army service.

Doctor L. A. King of Baroda will locate at St. Joseph. Doctor King just recently returned from France after serving for ten months with the Johns Hopkins hospital unit.

The announcement of the marriage of Dr. R. C. Allen of St. Joseph and a member of the Berrien County Medical Society, to Mrs. Helen Baker of Detroit has been made.

Dr. B. A. Shepard of Kalamazoo has opened a private sanatorium for the treatment of tuberculosis. The sanatorium is known as the Pine Crest Sanatorium.

Doctor and Mrs. B. D. Harison of Detroit, expect to open their summer cottage on Steer Island, St. Mary's River sometime during the latter part of June.

Captain R. C. Main, Marquette's first full-time health officer, has returned to his home from Ellis Island where he has been stationed for the past year.

Captain J. O. Parker of Owosso, recently discharged from Service has just received word that he has been promoted to rank of Major in the M. R. C.

Captain Thomas B. Marsden, M.C., 63 Own Avenue, Detroit, Michigan, has just returned from 21 months service in France. He has been assigned to United States General Hospital No. 36 for duty.

Captains Ward E. Collins and R. U. Adams have been spending a short time in Kalamazoo, and expect soon to be discharged and resume their practices in Kalamazoo.

On invitation of the Academy of Medicine the Northern Tri-State Medical Society will hold its next meeting in Kalamazoo.

Major R. E. Balch has been discharged and has returned to Kalamazoo and resumed the practice of surgery.

Dr. J. W. Bosman of Kalamazoo, who has been ill has sufficiently recovered to resume his practice.

Doctor F. S. Osterheld of Detroit has taken over the practice of Doctor James McGillicuddy of Ovid.

Doctor Ray E. Dean of Three Rivers is taking a post graduate course at the Harvard Medical University at Cambridge, Mass.

Captain L. J. Stafford of Adrian has returned from France where he was stationed with the Detroit College of Medicine and Surgery unit.

Dr. George Duffield of Detroit announces the

removal of his office to 80 Griswold street, Suite 418.

Dr. Howard P. Doub is now associated with Dr. Rollin H. Stevens in the David Whitney building, Detroit, Mich.

Doctors F. B. Tibbals and F. W. Robbins of Detroit, are going on a fishing trip the fore part of June. We wish them success.

Major F. C. Kidner of Detroit is now stationed at Base Hospital No. 36 (Ford Hospital). This hospital has about eight hundred beds.

McBrides, a good farming country in Montcalm County is in need of a physician.

Doctor Charles W. Ryan has been elected mayor of Battle Creek.

## COUNTY SOCIETY NEWS

It is the Editor's desire to have this department of the Journal contain the report of every meeting that is held by a Local Society. County Secretaries are urged to send in these reports promptly

### GRATIOT-ISABELLA-CLARE.

Dr. N. F. McClinton of Saginaw gave an interesting talk on the diagnosis and treatment of gonorrhea and syphilis at the meeting of the Gratiot-Isabella-Clare County Medical Society held April 24.

It was decided not to have a county society meeting in May on account of the Annual State Society Meeting to be held in Detroit on May 21st and 22nd.

### HOUGHTON COUNTY.

The newly elect officers of the Houghton County Medical Society are as follows:

President—Dr. Simon Levin, Lake Linden.  
Vice-President—Dr. R. J. Maas, Houghton.  
Secretary-Editor—Dr. W. A. Manthei, Hubbell.

### KALAMAZOO ACADEMY OF MEDICINE.

Special meeting of the Kalamazoo Academy of Medicine was held April 1st.

Because of the State meeting it was decided to not hold the second meeting in May.

The following program was carried out:

1. Circulatory Diseases of the Brain with Report on Three Hundred and Fifty Cases.  
Dr. S. U. Gregg, Kalamazoo State Hos.
2. Fractures and the Application of Army Splints.  
Capt. Chas. W. Mercer and Lt. Carl Crutchfield, Base Hospital, Camp Custer, Mich.

The regular meeting of the Kalamazoo Academy of Medicine occurred April 22nd.

The following program was carried out.

1. "Resume of the More Common Diseases of the Rectum and Colon with Special Ref-

erence to the Use of the Sigmoidoscope as an Aid in Diagnosis.

Dr. A. S. Youngs, Kalamazoo.

2. Remarks on Fractures, Joint Infections and Primary and Secondary Closure of Wounds.

Dr. Angus McLean, Detroit.

B. A. Shepard, Secretary.

### LAPEER COUNTY.

The following were elected officers of the Lapeer County Medical Society:

President—Dr. I. E. Parker, Dryden.  
Vice-President—Dr. F. A. Tinker, Lapeer.  
Secretary-Treas.—Dr. C. M. Braidwood, Dryden.  
Delegate—Dr. I. E. Parker, Dryden.  
Alternate—Dr. F. A. Tinker, Lapeer.

### LENAWEE COUNTY.

The Lenawee County Medical Society held its regular monthly meeting May 13, 1919, at the New Adrian Hotel, Adrian, Michigan.

Pres. R. H. Nelson, of Hudson, called the meeting to order following a dinner and social session.

The minutes of the previous meeting were read and approved.

In the absence of those who were to appear on the program several members reported interesting cases which were freely discussed.

Addresses were made by Dr. C. T. Southworth, of Monroe, Councillor of the 14th District, who complimented us on our showing and gave us words of encouragement, that we might boost our membership, and Dr. H. H. Hammel, of Tecumseh, who gave an account of some of his many interesting experiences in the service. Major Hammel was one of the first medical officers

to be sent to the relief of the British Medical Corps in 1917 at which time the British ranks were well nigh depleted. He was detached from the American army and attached to the British army so that he had opportunity of studying English methods. The use of picric acid in treatment of wounds was new to the members of the Society, none having read or heard of its employment as applied by the British. Major Hammel declared that it had completely taken the place of iodine in the British army, both by the surgeons and in the equipment of first-aid packets. A 10 per cent. solution in alcohol is applied to the skin in preparation of the field of operation and also to open wounds in the field.

Drs. H. H. Hammel and J. W. Beardsley, of Tecumseh, were new members taken into the Society.

The dues of Drs. A. W. Chase and G. M. Lochner, members still in the Service, were upon motion, paid out of the treasury, this bringing the total membership up to 27.

There being no further business, the Society adjourned.

E. T. Morden, Secretary.

#### MARQUETTE COUNTY.

At the annual meeting of the Marquette County Medical Society held in January the following officers were elected:

President—D. R. MacIntyre, Gwinn.  
Vice-President—C. N. Bottum, Marquette.  
Secretary-Treas.—H. J. Hornbogen, Marquette.  
Delegate to the State Meeting—A. W. Hornbogen, Marquette.  
Alternate Delegate—V. H. Vandeventer, Ishpeming.

#### OAKLAND COUNTY.

The Annual Meeting of the Oakland County Medical Society was held April 18th in Pontiac. The newly elected officers are:

President—Dr. N. T. Shaw, Birmingham.  
Vice-President—Dr. S. E. Galbraith, Pontiac.  
Secretary-Treas.—Dr. D. G. Castell, Pontiac.  
Delegate—Dr. P. D. Hilty, Birmingham.  
Alternate—Dr. J. J. Murphy, Pontiac.  
Board of Directors—R. Y. Ferguson, Pontiac;  
E. Orton, Pontiac, C. J. Southerland, Clarkston.  
Col. Angus McLean of Detroit gave a fine talk on "War Surgery."

*Diphtheria Toxin-Antitoxin Mixture—Lederle.*—A mixture consisting of five L+ doses of toxin and 6.25 units of antitoxin. Marketed in vials containing one dose. Three doses are packed in a carton. Schieffelin and Co., New York.

### Book Reviews

THE NEW GRAND ARMY OF THE REPUBLIC AND ITS ORGANIZATION. By Loren C. Grieves, Lieutenant Colonel, U. S. Army.

This book contains the first broad, general outline of a most gigantic organization which is now being created for the banding together of the vast number of individuals who saw service both at home and abroad during the great war. Colonel Grieves is a West Pointer, class of 1904, and has held important army positions since his graduation. He saw active service in France with the 2nd and 37th Divisions in the operations branch of the General Staff.

This interesting book outlines the probable policy of the new Grand Army and points out the vital importance of this nation-wide organization to all who were in the service and to all public-spirited Americans.

George H. Doran Company, Publishers, New York.

ESSENTIALS OF SURGERY. A Textbook of Surgery for Student and Graduate Nurses and for Those Interested in the Care of the Sick. By Archibald Leete McDonald, M.D., the Johns Hopkins University. Formerly in charge of Department of Anatomy, University of North Dakota, etc. 265 pp., 46 illustrations. J. B. Lippincott Company, Philadelphia and London. 1919.

The author has prepared in a simple, concise and clear manner the principles of surgery for nurses and includes etiology, pathology, surgical anatomy, course of disease and indications for treatment. The graphic illustrations are clearly pictured and easily understood. Each chapter is followed by useful suggestions for demonstrations of the subjects discussed.

*Swan's Mixed Furunculosis Bacterin* (No. 39).—Marketed in 6-Cc. vials, each cubic centimeter containing 500 million killed *Staphylococcus pyogenes-aureus* and 500 million killed *Staphylococcus pyogenes-albus*. For a discussion of *Staphylococcus Vaccines*, see *New and Nonofficial Remedies*, 1919, p. 289.

*Swan's Typhoid-Paratyphoid Bacterin* (No. 42) (Prophylactic).—Marketed in packages of three 1-Cc. vials, one vial containing 500 million killed typhoid bacilli and 250 million each of paratyphoid bacilli A and B, while the other two vials each contain 1 billion killed typhoid bacilli and 500 million each of paratyphoid bacilli A and B. For a discussion on Typhoid Vaccine, see *New and Nonofficial Remedies*, 1919, p. 292. (*Jour. A.M.A.*, March 22, 1919, p. 863).

## Miscellany

Mr. W. H. Long, acting Secretary for the Pennsylvania Association for the Blind, reports that it is 100 per cent. easier for the blind to get positions than it was a year ago. Opportunities are opening up for the blind every day, and the public is having its eyes opened as to what they can do. In Canada massage, Braille, shorthand, and poultry raising are popular courses with the blind, and they have become very proficient in them in a great many cases.

The 32nd Annual Convention of the American Association of Orificial Surgeons will be held September 15-16-17 at the Congress Hotel, Chicago. The forenoons will be given to operative demonstrations at the hospital.

The program will be replete with practical addresses, essays and papers by prominent Orificialists. The clinics will be interesting as usual. September 15-16-17 Congress Hotel, Chicago.

The Fourth Annual Meeting of the American Association of Industrial Physicians and Surgeons will be held at Atlantic City, N. J., June 9th, 1919, the Monday of the week of the A.M.A. meetings. Headquarters will be at The Breakers on the Boardwalk. There will be a morning and an afternoon session and a banquet in the evening. It is urged that members engage accommodations at The Breakers.

The National Society for the Study and Correction of Speech Disorder will have its summer meeting in Milwaukee, on July 4, as one of the affiliated Societies of the National Educational Association. Members of the Society and invited guests of prominence in the field of speech correction, will address the Association. Anyone interested to receive an advanced program may do so by addressing the Secretary, Miss Marguerite Franklin, 110 Bay State Rd., Boston, Mass.

### PROPAGANDA FOR REFORM.

*Malt Preparations in Infant Feeding.*—Malt preparations have enjoyed popularity for some time in the feeding of infants. A familiar mixture is the so-called malt soup, the use of which was modified by Keller to include potassium carbonate. The assimilability of maltose has been highly lauded, but the advantage over other carbohydrates has not been definitely proved. Maltose has been vaguely stated to be indicated in the constipation of infants and the retention of calcium facilitated by the use of Keller's formula. However, in experiments on animals it was found that administration of a base like sodium carbonate produced any effect on the balance of calcium. It has also been reported that in a normal infant the addition of alkali to milk produced an unfavorable effect on calcium retention. Without addition of alkali, malt extract was found to act beneficially on calcium storage, but this is probably not due to the maltose. If malt soup has a favorable effect on calcium metabolism, it is not due to the alkali originally present or added to it.

There is no reason at present to attribute the seemingly substantiated benefit from malt preparations on calcium storage to the maltose (*Jour. A.M.A.*, March 1, 1919, p. 656).

*Pharmaceutical Manufacturers and "Private Formula" Products.*—Sharp and Dohme explain that it is their inflexible rule that all "private formula" orders intended for public distribution are refused until the copy for the "literature" has been studied by their experts. They explain that an order for three preparations which were later the subject of prosecution for misbranding under the federal Food and Drugs Act were filled and shipped in the belief that the copy had been passed on by their Spanish expert, when in reality this had not been done. The house of Sharp and Dohme feels that it has been done an injustice in the publication of the "misbranded nostrum" notices which gave no hint that the preparations were private formula products, and were not sold under the name of Sharp and Dohme. The firm believes that an injustice was done in that the references to these misbranded nostrums will lead readers to believe that they were sold under the label of Sharp and Dohme. There is unfortunately a commercial distinction between products which are made by a firm and products which are sold by it. Whether or not there is any moral difference between profiting by the manufacture of a "patent medicine," that is to be retailed by some one else, and selling the same medicine under one's own name, is a question. (*Jour. A.M.A.*, March 1, 1919, p. 669).

*Misbranded Nostrums.*—The following nostrums were declared misbranded under the Federal Food and Drugs Act because of the false, fraudulent or misleading claims made for them: Alkavis; Sulfero-Sol; Gonorrhea and Gleet 3 Day Cure; Old Indian Fever Tonic; Pain-I-Cure; Walker's Dead Shot Colic Cure (*Jour. A.M.A.*, March 1, 1919, p. 670).

*Saccharin—After the War.*—Having satisfied a need during the sugar shortage, the manufacturers of saccharin appear not to be content to turn their talents and plants to better uses, but suggest that the great commercial sacrifices made in setting their works into operation to produce saccharin should be rewarded by permission to continue the traffic under post-war conditions. The referee board to which the saccharin question was referred in this country has by no means given a clean bill of health to the chemical, and the people need to be protected from the danger, or at least the deception, of a substitute for sugar which is in no sense a true food. (*Jour. A.M.A.*, March 8, 1919, p. 729).

*Organo Tablets and Orchis Extract.*—The Organo Product Co., Chicago, sells Organo Tablets as a cure for "lost vitality." The Packers Product Co. sold Orchis Extract until it was put out of business by the government in 1918 by the issuance of a fraud order. Even a superficial comparison of the circular letters and booklets used in exploiting Organo Tablets shows a close connection between this humbug and the government declared fraud—

Orchis Extract. Has Orchis Extract of the Packers Product Co. become Organo Tablets of the Organo Product Co. (*Jour. A.M.A.*, March 8, 1919, p. 746)?

*Depilagiene*.—The A.M.A. Chemical Laboratory reports that "Franco-American Hygienic Depilagiene," a hair remover, essentially is a mixture of barium sulphate, barium sulphid, sulphur and starch. The amount of barium sulphid was found to be 22.6 per cent. this is equivalent to about 45 per cent. of commercial barium sulphid. Depilagiene has no claim to originality as practically all chemical hair removers are composed of some form of sulphid. Naturally, the preparation is likely to cause more or less irritation of the skin. (*Jour. A.M.A.*, March 8, 1919, p. 746).

*Validity of Provisions Concerning "Patent" Medicines*.—In the proceedings instituted by E. Fougere and Co., Inc. against the City of New York et al. the Court of Appeals of New York holds that the provision of the sanitary code is not unconstitutional in that it prescribed the formula disclosure of medicines. The purposes and effects of the code were well within the police power and had the object of protecting the public. "No man has a constitutional right to keep secret the composition of substances which he sells to the public as articles of food" (State v. Aslesen, 50 Minn. 5, 52 N. W. 220). If that is true of food, it is even more plainly true of drugs. But there was one objection to the ordinance, though one that amendment might correct; that the ordinance did not except existing stores of merchandise in the hands of dealers, in that the board of health exceeded the powers delegated to it. (*Jour. A.M.A.*, March 8, 1919, p. 753.)

*The Victory Over Rabies*.—Amid the victories on the European battlefield, we may pause to contemplate man's conquest of rabies. During the year 1916, 1,008 persons in the district of Lyons received the antirabic treatment. A single death in this list places the mortality at 0.099 per cent. Since 1900, more than 9,000 persons have received antirabic inoculations, with a total of nine deaths, or 0.09 per cent. (*Jour. A.M.A.*, March 15, 1919, p. 800.)

*Nature's Remedy Tablets*.—A. H. Clark, of the A.M.A. Chemical Laboratory, reports that "Nature's Remedy" is claimed to contain ten ingredients; that the manufacturers declare seven of these—burdock, juniper, sarsaparilla, mandrake, rhubarb, dandelion and prickly ash; and that the manufacturers state they are "more proud" of the other three, but refrain from naming them for fear of imitators. Clark's analysis, supplemented by a microscopic examination by E. N. Gathercoal at the University of Illinois School of Pharmacy, indicated that the unnamed drugs are aloes (or a preparation of aloes), cascara bark and belladonna root. The microscopist stated that rhubarb, as well as all the other named drugs, if present at all are there in such small quantities that no evidence of their presence was seen. As a result of the examination and a consideration of their powerful cathartic action, it is believed that Nature's Remedy is,

essentially, aloes or aloin, cascara, and belladonna with, probably, resin of podophyllin (instead of mandrake)—a common cathartic mixture. (*Jour. A.M.A.*, March 15, 1919, p. 815).

*Misbranded Nostrums*.—A "Notice of Judgment" has been issued declaring the following nostrums misbranded: Chase's "Blood and Nerve Tablets" "Liver Tablets," and "Kidney Tablets"; XXX Tonic Pills; Egiutero; Uicure; Sweet Rest for Children; Beaver Drops Comp.; Blood Kleen; Heart and Nerve Regulator; Kidneyline; Eye Powder; Tanrue Herbs and Pills, and 5 Herbs. (*Jour. A.M.A.*, March 22, 1919, p. 883).

*Havens' Wonderful Discovery*.—The Council on Pharmacy and Chemistry reports that E. C. Havens, Sioux Falls, S. D., requested consideration of a remedy which he claims to have discovered for the cure of influenza. According to the label on a specimen, "This remedy is good for Coughs, Colds, Lung Diseases, LaGrippe, Influenza, Rheumatism; good for Pains, Cramps, Backache, Lumbago, Neuralgia; for severe pains soak your feet in hot water for 3 nights, add 3 tablespoons of baking soda in water and apply Anti-Flue Medicine to the affected parts." The "discovery" was stated to contain oil of wintergreen, oil of sassafras, oil of black pepper, spirit of camphor, spirit of turpentine, spirit of chloroform, tincture of arnica and alcohol, and was called Havens' Rheumatic Remedy before its supposed effect on "flue" was "discovered." The Council finds that Havens' Wonderful Discovery is an unscientific, irrational mixture, marketed under therapeutic claims which are unwarranted and without foundation. (*Jour. A.M.A.*, March 22, 1919, p. 883).

*Dichloramine-T and Petrolatum Dressing for Burns*.—Torald Sollmann reports that solutions of dichloramine-T in chlorcosane do not protect the large open surfaces of burns against mechanical irritation and access of air. On the contrary, the solution is absorbed by the dressing, which is then glued by the wound secretions and causes pain and injury when the dressing is changed. As a result of a study of the decomposition of dichloramine-T by different solvents, Sollmann proposes the use of an ointment of three parts of surgical paraffin and seven parts of liquid petrolatum as a protective dressing on wounds (burns) treated with dichloramine-T—chlorcosane solution. It may even be used as a basis for a dichloramine-T ointment. (*Jour. A.M.A.*, April 5, 1919, p. 992).

*Stevens' Consumption Cure*.—C. H. Stevens, a discredited London quack, has been attempting to exploit Canadian veterans at the Mountain Sanatorium for the treatment of pulmonary tuberculosis at Hamilton, Ont. The nostrum was claimed to contain "Umckaloabo root" and "Chijitse," but the analysis made for the British Medical Association showed it to contain no active drugs except alcohol and glycerin. The following is a brief history of this "cure": In 1904 Stevens was selling "Sacco" in Capetown, South Africa, but got into the courts

and found it expedient to leave Capetown. In 1906, Stevens was in Johannesburg trading as the "South African Institute of Medicine" and selling his stuff as "Lungsava;" was twice convicted of violating the law and left for England. In 1907, Stevens was in London selling his "cure," and in 1910 was declared by the courts to be guilty of intentional fraud and his "cure" pronounced a quack remedy. In 1915, Stevens' "cure" appeared in the United States under the name of "U. C. Extract" exploited by the Umckaloabo Chemical Company of New York City. To-day, Stevens is attempting to exploit tuberculous Canadian soldiers who have acquired the disease in the service of their country. (*Jour. A.M.A.*, April 5, 1919, p. 1018).

**Surgical Solution of Chlorinated Soda (Dakin's Solution).**—According to New and Nonofficial Remedies, 1919, surgical solution of chlorinated soda may be prepared: 1. By the electrolysis of a sodium chlorid solution. 2. By the action of chlorin on sodium carbonate. 3. By the interaction of chlorinated lime and sodium carbonate solutions with subsequent treatment with either boric acid or sodium bicarbonate to reduce the alkalinity. (*Jour. A.M.A.*, April 5, 1919, p. 1021).

**Procaïn Anesthesia.**—There is no evidence of latent injury to the dental nerves from repeated injections of procaïn to control supersensitiveness of the teeth. If an isotonic solution is used and this solution made sterile by boiling, it is not probable that it will be injurious. (*Jour. A.M.A.*, April 8, 1919, p. 1022).

**Iodex.**—According to Pharmacal Advance, a house organ extolling the products exploited by Menley and James, Iodex has all the virtues of free iodine without its drawbacks. The claim that a given proprietary represents all the desirable therapeutic properties of a drug but not its drawbacks has been so often proved unwarranted that the claims made for Iodex should receive scant consideration. The report of the A.M.A. Council on Pharmacy and Chemistry on Iodex included a report from the A.M.A. Chemical Laboratory which showed that Iodex, despite the advertising claims, contains no free iodine;—to be exact, when a test for free iodine was made on five specimens, four yielded only minute traces of iodine, while the fifth yielded none. (*Jour. Mo. State Med. Assn.*, April, 1919, p. 127).

**Paw Paw Tonic.**—An advertisement declares that "Paw Paw Tonic" contains no alcohol, but admits that it contains port wine. A newspaper item details the conviction of a Charlotte, N. C., druggist for selling this tonic to young men who become drunk from drinking it. The counsel for the druggist maintained that if Paw Paw Tonic was taken according to directions, the medicine would not produce intoxication. The jury decided that a "patent medicine" which when taken in liberal quantities will produce intoxication, is an intoxicating liquor. (*Jour. A.M.A.*, April 12, 1919, p. 1079).

**Proflavin Oleate.**—This is stated to be the oleic

acid salt of the base contained in proflavin (the soluble sulphate of 3,6-diamino acridine. Proflavin oleate is not obtainable in the United States. Proflavin has been proposed in England for use as a wound antiseptic, but its usefulness has been seriously questioned. (*Jour. A.M.A.*, April 12, 1919, p. 1099).

**Buttermilk Therapy.**—For reliable information with regard to new therapeutic measures and reliable brands of drugs proposed for them, New and Nonofficial Remedies should be consulted. This book contains a chapter which discusses the probable value of the Metchnikoff sour milk therapy. The book also describes those brands of preparations which the Council on Pharmacy and Chemistry found to be reliable and exploited decently. (*Jour. A.M.A.*, April 12, 1919, p. 1099).

**The Advertising of Sal Hepatica.**—There are two ways of advertising a "patent medicine"—by direct advertisement to the public and by means of propaganda which will lead the medical profession to acquaint the public with it. Sal Hepatica is advertised by the indirect method. (*Jour. A.M.A.*, April 12, 1919, p. 1079).

**Collosol Cocaine Not Admitted To N. N. R.**—Collosol Cocaine (Anglo-French Drug Co. Ltd., New York) is claimed to be a preparation containing 1 per cent. of cocaine in colloidal form and is alleged to possess a remarkably low toxicity. However, the A.M.A. Chemical Laboratory found that a specimen contained not more than 0.4 per cent. of alkaloid; hence it does not have the composition claimed and is in effect misbranded. Further, in England it was conceded that the preparation was not an "absolute colloid" and that the declaration with regard to the percentage of cocaine was incorrect (Barger, Dale and Durham reported that a specimen was found to contain but 0.25 per cent. of cocaine). Without considering other objections, the Council on Pharmacy and Chemistry declared Collosol Cocaine inadmissible to New and Nonofficial Remedies because its composition was not correctly declared. (*Jour. A.M.A.*, April 12, 1919, p. 1094).

**Cuprase Not Admitted to N. N. R.**—Cuprase, sold by the Anglo-French Drug Co. Ltd., New York, is stated to be a colloidal copper hydroxid containing 0.00121 gm. copper per 6 c. c. ampule. A box of eight ampules is sold by the agents for eight dollars and fifty cents, less 10 per cent. discount. The Council on Pharmacy and Chemistry reports that the therapeutic claims made in the advertising are those commonly made for cancer "cures" and are about equally convincing. It declares that some of the claims can not be too severely condemned in a preparation which at best has only an experimental status. The evidence for the value of Cuprase published by the manufacturers or agents presents only vague generalities and no definite data. On the other hand, the evidence gathered by Weil some years ago permits an estimate of the value of Cuprase, and it is en-

tirely unfavorable. In view of the extravagant and cruelly misleading claims and indefinite statement of composition, the Council voted that Cuprase is ineligible for New and Nonofficial Remedies. (*Jour. A.M.A.*, April 12, 1919, p. 1095).

*Goldenrod and Hay Fever.*—In spring hay fever is caused chiefly by the pollens of grasses. The fall hay fever in the Northern, Eastern and Southern states is for the most part attributed to the pollens off the ragweeds. In the Pacific and Rocky Mountain states they are replaced by the wormwoods. Scheppegegrell has concluded that goldenrod does not cause hay fever. (*Jour. A.M.A.*, April 19, 1919, p. 1162).

*Germany and The American Chemical Industry.*—The Alien Property Custodian has issued a report which, in part, is devoted to a discussion of the influence which Germany has had on the chemical industry in the United States. It outlines how the German government obtained a practical monopoly in the United States in dyes, fine chemicals and synthetic drugs. The report explains how by-products of the dye works were converted into explosives—trinitrotoluene, for instance—and the advantage which the production of these explosives gave to Germany as a military power. The report explains that in medicinal chemicals very little real manufacture existed in the United States. The report discusses the ramifications of the "Big Six"—the German concerns which controlled the dye industry—in American industrial life and describes how their American branches were shown to be enemy owned and therefore taken over by the custodian. The "Big Six" were: Badische Anilin and Soda Fabrik, Farbenfabriken vorm. Friedr. Bayer and Co., Actien-Gesellschaft fur Anilin-Fabrikation, Farbwerke vorm. Meister Lucius and Burning, Leopold Cassella, G. m. b. H., and Kalle and Co. Aktien-Gesellschaft. The American firms were: Badische Co. of New York, Bauer Chemical Company, Bayer and Co. (Inc.), Berlin Aniline Works, Casella Co., Farbwerke Hoechst Co., Heyden Chemical Works, Kalle and Company, Merck and Co., Roessler and Hasslacher Chemical Company and Synthetic Patents Co. (Inc.). The report closes with a description of a corporation to be known as the Chemical Foundation, Inc., which is to acquire by purchase the German patents which in the past have formed a colossal obstacle to the American dyestuff industry. The Alien Property Custodian has sold to this company for the sum of \$250,000 approximately 4,500 patents. (*Jour. A.M.A.*, April 19, 1919, p. 1176).

*Anthelmintics.*—The earthworm reacts with symptoms of toxicity to all clinical anthelmintics just as do the parasitic intestinal worms. This fact has enabled Torald Sollmann to re-investigate the claims long made for certain drugs. Spigelia was found to have rather feeble toxicity, but fresh pumpkin seed and squash seed were quite highly efficient. (*Jour. A.M.A.*, April 26, 1919, p. 1228).

*Annual Meeting of the Council on Pharmacy and Chemistry.*—Among the subjects considered at the recent meeting were: The Council decided to pub-

lish at an early date a report on the unscientific and commercial propaganda for nonspecific protein therapy. The Council appointed a committee to study the problems of serum and vaccine therapy with a view of publishing the evidence obtainable regarding both the value of, and also the dangers incident to, the use of serums and vaccines. A special committee was appointed to report on the present status of pollen extracts in the prophylaxis and treatment of hay fever. The Council adopted a resolution urging legislation which shall require the Public Health Service to extend its control of serums, vaccines, toxins and antitoxins to cover other patent remedies that are used hypodermically or intravenously. The Council passed a resolution that the control of arsphenamine by the Public Health Service shall be continued and the price controlled by the government. The Council decided to describe in a separate section of New and Non-official Remedies proprietary preparations of therapeutic value which are so exploited as to be inadmissible to New and Nonofficial Remedies. A committee was appointed to establish fuller cooperation between teachers of therapeutics and pharmacology in medical schools and the Council. A committee was appointed to determine the present status of radium water therapy. (*Jour. A.M.A.*, April 26, 1919, p. 1243).

*Veracolate Tablets.*—The Council on Pharmacy and Chemistry examined Veracolate (Marcy Co.) in 1915 and found it to be semisecret in composition, unscientific in combination and exploited under unwarranted claims. (*Jour. A.M.A.*, April 26, 1919, p. 1245).

#### NEW AND NON-OFFICIAL REMEDIES.

The following articles have been accepted by the Council on Pharmacy and Chemistry during March and April:

Swan-Myers Company:

Swan's Mixed Acne Bacterin (No. 41).

Swan's Pertussis Bacterin (No. 38) (Prophylactic).

Swan's Mixed Furunculosis Bacterin (No. 39).

Swan's Typhoid-Paratyphoid Bacterin (No. 42). (Prophylactic).

Non-Proprietary Articles:

Mercurialized Serum.

Diphtheria Toxin-Antitoxin Mixture.

Abbott Laboratories:

Barbital-Abbott Tablets, 5 grains.

Lederle Antitoxin Laboratories:

Anti-Anthrax Serum (Lederle).

Antidysenteric Serum (Polyvalent) (Lederle).

Tuberculin von Pirquet Test ("T. O.") (Lederle).

Tuberculin Subcutaneous Test ("T. O.") (Lederle).

Tuberculin "B. E." (Bacillus Emulsion) (Lederle).

Tuberculin "B. F." (Bouillon Filtrate) (Lederle).

Streptococcus Vaccine, Polyvalent (Lederle).

Paratyphoid Vaccine (Lederle).

Schick Test (Lederle).

Mercurialized Serum-Lederle.

Diphtheria Toxin-Antitoxin Mixture-Lederle.